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ABSTRACT

This manual is designed to help baking students learn to use formulas in the preparation of baking products. Tested and proven formulas are, for the most part, standard ones with only slight modifications. The recipes are taken mainly from bakery product manufacturers and are presented in quantities suitable for school-shop use. Each recipe contains measures (expressed in weights), ingredients, method steps for combining ingredients, and production techniques. Four instructional objectives are outlined in the beginning of the manual. For example, the first objective is that the student will be able to accurately scale and measure baking ingredients. Following the statement of objectives, safety and sanitation are briefly discussed. Seven sections contain tips and recipes for breads, cakes, pastries, pies, cookies, icings, and fillings. Tips on bread, for instance, include comments on quality, vitamins, mold and rope, and causes of bread faults. A glossary of baking terms concludes the manual. (CSS)

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SELECTED BAKING FORMULAS

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U.S. DEPARTMENT OF HEALTH,
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TEACHING
LEARNING
MATERIALS

TO THE STUDENT

To be a success and advance in the baking field, you will need skill in working with formulas. Mastering formulas will add to your baking knowledge, and you will be able to take pride in knowing that you have done a thorough job, from start to finish.

The author hopes this collection of formulas and helpful tips will aid you in developing your bakery skills. Best wishes for your success in your chosen field.

TO THE TEACHER

This manual has been prepared to help the conscientious baking student learn to use formulas in the preparation of bakery production.

Most of the formulas are standard ones used in the trade, with slight modifications. They have been taken from various sources, mainly manufacturers of bakery products, and cut down to quantities suitable for school-shop use. Principal sources have been Armour and Company, General Mills, Hunt Wesson Foods, and Swift and Company.

The formulas have all been tested and proven in the bakeshop at the Middlesex County Vocational and Technical High School in Woodbridge, New Jersey.

It is hoped that the format of this manual will prove practical in use, and that the general tips that precede each section will be helpful to the students.

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INSTRUCTIONAL OBJECTIVES

A. The student will be able to accurately scale and measure ingredients used in baking.

B. Using a given formula, the student will be able to combine two or more ingredients.

C. The student will be able to apply the retardation process in the preparation of baked goods.

D. The student will be able to acquire fundamental skills necessary for the preparation of bakery products.

A WORD ABOUT SAFETY

Every employer looks for good safety habits in his workers. This is particularly so in the baking industry. In the bakeshop one must be safety-conscious at all times. Machinery is made to be productive, but if one is careless, it can become destructive.

Safety is an *attitude of mind* that must be practiced at all times. Remember, we must think of others and their safety as well as our own.

BAKESHOP SANITATION

All important to the preparation of food and foodstuffs is cleanliness. Without strict cleanliness, disease-causing germs can be spread. The public rightly demands high standards of sanitation.

It is therefore necessary to keep equipment clean at all times. It is especially important to clean equipment immediately after use, before germs get a chance to multiply.

Sanitation also means that the people working in food-preparation fields should keep themselves clean and well-groomed. They must have clean hands at all times, cover their hair, refrain from coughing or sneezing near the food, and in short, practice all the rules of good personal hygiene.

SECTION I – BREADS

THE QUALITY OF BREAD & ROLLS

It has been said that bread is the staff of life. Our quality of life depends upon a number of factors, one being the ingredients used in our foods, including bread. Throughout the world, millions of tons of bread are consumed yearly, and there is hardly a meal we sit down to that we don't find a baked product on our table.

Whether or not the consumer is aware of the quality of your baked goods is of little importance, for it is up to you to know and use only high-quality ingredients. It is up to you to be aware of the appearance, uniformity, flavor, and taste of the products you produce. Just as you don't appreciate being short-changed, don't you short-change the public.

VITAMIN–MINERAL ENRICHMENT OF BAKED GOODS

Because certain vitamins and minerals are removed from the wheat in the milling process, the Federal government and most states have passed laws requiring white flour to be "enriched." This means that the vitamins thiamine, niacin, riboflavin, and the mineral iron are added in definite amounts to white flour. Just about all breads and bread flours sold today are enriched.

MOLD AND ROPE

Mold is a plant-like fungus growth which attacks bread after it is baked. In hot, humid weather, mold can be very noticeable on bread within six hours after it is wrapped.

Mold grows from spores – tiny specks that are the "seeds" of the mold plants. The spores float in the air around us. These spores can be carried through the air to the bread being wrapped or to any baked products on racks. Temperatures of 85° to 100°F. and high humidity are all that are needed for these spores to start to multiply rapidly, feeding on the bread and ruining it. That is why all old baked goods should be disposed of daily.

Rope is caused by certain bacteria in the air that get into the dough and then multiply in the bread. Usually, this can be detected by a sickeningly sweet odor of the infected bread. The ropy bread will have a dark crumb color in the center and have a stringy consistency to it. Constant cleanliness in the bakeshop is essential to prevent or eliminate this problem.

CAUSES OF BREAD FAULTS (1)

When bread lacks volume

1. Not enough yeast
2. Too much salt
3. Improper mixing
   (Too much –– not enough)
4. Old dough (lying too long)
5. Young dough (not enough rest)
6. Pan too big for loaf
7. Not enough proofing
8. Oven temperature too high

When bread has too much volume

1. Not enough salt
2. Pans are too small
3. Over-proofing
4. Oven temperature too low

Crust color too dark

1. Too much sugar
2. Young dough
3. Oven temperature too high

Poor taste and flavor

1. Poor quality ingredients
2. Incorrect formula
3. Not enough salt
4. Old dough
5. Over-mixed dough
6. Unsanitary bakery
7. Poor storage conditions

Poor texture

1. Old dough
2. Over-mixed dough
3. Over-proofed dough
4. Oven temperature too low

Thick crust

1. Dough too old
2. Not enough sugar or malt
3. Crusted in proofing
4. Oven temperature too low
5. In oven too long

CAUSES OF BREAD FAULTS (2)

Holes in bread

There are several factors in breadmaking that may be responsible for large holes or air pockets in bread.

Some of the causes are:

1. Flour was stored too long.

2. Flour was exposed to very cold temperatures.

3. Unsuitable type of flour

4. Old dough

5. Over-mixed dough

Pale crust color

1. Not enough sugar or malt
2. Old dough
3. Overly fermented dough
4. Crust formed in proofing
5. Oven temperature too low

Poor keeping qualities

1. Poor-quality ingredients
2. Improper mixing
   (over or under)
3. Wrong amount of some ingredient
4. Dough too young or old
5. Over-proofing
6. Low oven temperature

White Bread

4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
8	–	Cold water	Step 1: Use a dough hook. Mix the dry ingredients well into the cold water.
–	4	Salt	
1	–	Granulated sugar	
1	–	Dry malt	
1	–	All-purpose shortening	
1	–	Non-fat dry milk	
1	–	Yeast	Step 2: Break up into the above mixture and dissolve.
13	–	Patent flour	Step 3: Add to the above. Mix until smooth.
26	4	Total Weight	

White Bread Production

1. Place the dough in a *closed* container, allowing room for the dough to rise and spread. (The closed container will prevent a crust from forming.)

2. Allow the dough to rest for 1 hour and 30 minutes. Fold over (punch) from all sides. Recover and let the dough rest for 30 minutes more.

NOTE: When the weather becomes warm or hot, the time will have to be shortened.

3. Dough is scaled into 35 12-oz. pieces or 23 18-oz. pieces. Re-place scaled pieces in the covered container. Allow to rest 10 to 15 minutes.

NOTE: One ounce of dough is lost for every 8 ounces of dough in baking. This is caused by evaporation of water during the baking process.

4. Make up the dough pieces into the desired shape.

5. Place the made-up bread pieces in clean and lightly greased pans (sides only).

6. Proof the bread to three quarters of the height of the pans.

7. Bake at 400° to 415° F. Bake until golden brown in color; baking time is between 35 and 40 minutes. Small loaves take less time.

8. After the bread is removed from the oven, take the bread out of the pans immediately. If the breads are left in the pans, they will become soggy.

French Bread 4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
8	–	Cold water	Step 1: Use a dough hook. Mix the dry ingredients well into the cold water.
–	4	Salt	
–	2	Dry malt	
–	4	All-purpose shortening	
–	2	Non-fat dry milk	
–	4	Yeast	Step 2: Break up into the above mixture and dissolve.
13	8	Patent flour	Step 3: Add to the above. Mix until smooth.

22 8 Total Weight

French Bread Production

1. Place the dough in a *closed* container, allowing room for the dough to rise and spread. (The closed container will prevent a crust from forming.)
2. Allow the dough to rest for 2 hours. Fold over (punch), re-cover, and let the dough rest for another 45 minutes.
3. Scale the dough into 24 15-oz. pieces. Let the dough pieces rest 15 to 20 minutes.
4. Make up into loaves the width of the proofing boards. Place the breads on *corn-meal-dusted* proofing boards. Place made-up breads into the proof box.
5. Proof until breads double in size.
6. Oven temperature approximately 450°F.
7. Baking time 30 to 40 minutes.
8. Some steam should be used in the first few minutes when baking French bread.

Italian Bread 4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
8 – – –	– 4 2 4	Cold water Salt Dry malt All-purpose shortening	Step 1: Use a dough hook. Mix the dry ingredients well into the cold water.
–	4	Yeast	Step 2: Break up into the above mixture and dissolve.
13	4	High-gluten flour	Step 3: Add to the above. Mix until smooth.

22 2 Total Weight

Italian Bread Production

1. Place the dough in a *closed* container, allowing room for the dough to rise and spread. (The closed container will prevent a crust from forming.)
2. Allow the dough to rest 2 hours. Fold over (punch), re-cover, and let the dough rest 30 minutes.
3. Scale the dough into 25 14-oz. pieces. Let the scaled dough pieces rest 10 to 15 minutes.
4. Place the made-up breads on *corn-meal-dusted* proofing boards and into the proof box.
5. Proof until doubled in size.
6. 450°F. is the approximate baking temperature.
7. Baking time 20 to 25 minutes.
8. A slow, light steaming may be used when baking Itlaian bread.

Egg-Roll Dough

4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
8 – 1 1 2 2	– 6 – – -- –	Cold water Salt Granulated sugar Dry malt Oil (cottonseed / soybean) Whole eggs	Step 1: Use a dough hook. Mix all ingredients well into the cold water.
1	–	Yeast	Step 2: Break up into the above mixture and dissolve.
18	–	High-gluten flour	Step 3: Add to the above. Mix until smooth (approximately 15 minutes).
33	6	Total Weight	

Egg-Roll Dough Production

1. Place the dough in a *closed* container, allowing room for the dough to rise and spread. (The closed container will prevent a crust from forming.)

2. Allow dough to rest for 1 hour. Fold over (punch), re-cover, and let dough rest for another 30 minutes.

3. Scale the dough into twelve 2 lb. 12 oz. presses. Let dough presses rest from 10 to 15 minutes.

4. Roll out the dough presses evenly. Press out into individual pieces, laying them flat on the bench. Make strips of dough and dust lightly with rye flour.

   Make up into desired shapes (knot rolls, figure-8 rolls, 3-braid rolls, etc.).

5. Place the made-up rolls close together on a wooden board or on the back of a clean pan. Egg-wash the rolls liberally. Place 36 rolls on a full sheet pan (5 rolls across by 7 down plus 1).

6. Place the rolls in the proof box. Remove when rolls are half-proofed and egg-wash again; seeds may now be applied to some of the rolls.

7. Bake at 400°F. until rolls are golden brown, both top and bottom.

Egg-Bread Dough (Challah) **4 Quarts or 1 Gallon**

Lb.	Oz.	INGREDIENTS	METHOD
8	–	Cold water	Step 1: Use a dough hook. Mix all ingredients well into the cold water.
–	6	Salt	
1	8	Granulated sugar	
1	–	Dry malt	
2	–	Oil (cottonseed/soybean)	
4	–	Whole eggs and 4 egg yolks	
1	–	Yeast	Step 2: Break up into the above mixture and dissolve.
26	–	High-gluten flour	Step 3: Add to the above. Mix until smooth, approximately 15 minutes.
43	14	Total Weight	

Egg-Bread Dough Production

1. Place the dough in a *closed* container, allowing room for the dough to rise and spread. (The closed container will prevent a crust from forming.)

2. Allow the dough to rest 1 hour. Fold over (punch), re-cover, and let dough rest for another 30 minutes.

3. Scale dough into eight 6-lb. presses. Let dough presses rest 10 to 15 minutes.

4. Press out each press into 36 individual pieces, laying them flat on the bench. Make strips of dough and dust lightly with rye flour.

   Make up into desired shapes (6-braid twist bread, 4-braid twist bread, section-type bread, and round or Rudisch bread).

   NOTE: 6 pieces make a 1-lb. loaf.

5. Egg-wash the tops of the breads and proof to half-proof. Remove from proof box and wash again; seeds may be applied to the tops after the second wash.

6. Bake at 350° to 360° F. until golden brown, both top and bottom. Can be baked on pans or hearth (35 to 40 minutes).

Hamburger- and Frankfurter-Roll Dough 4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
–	4	Salt	Step 1: Using a paddle, mix to a smooth paste.
1	8	Granulated sugar	
–	8	Non-fat dry milk	
1	4	All-purpose shortening	
1	–	Whole eggs	Step 2: Add to the above mixture and mix well.
8	–	Cold water	Step 3: Add to the above, mixing in only slightly.
–	12	Yeast	Step 4: Break up into the above and dissolve.
13	8	Patent flour	Step 5: Add to the above and mix until dough is smooth. Keep dough on cool side.
26	12	Total Weight	

Hamburger- and Frankfurter-Roll Dough Production

1. Place the dough in a *closed* container, allowing for the dough to rise and spread. (The closed container will prevent a crust from forming.)
2. Allow the dough to rest for approximately 1 hour and 30 minutes. Fold over (punch), re-cover, and let the dough rest for another 30 minutes.
3. Scale the dough into 7 presses at 3 lb. 13 oz. each. Let presses rest for 10 minutes.
4. Press out and place on the bench. For hamburger rolls, round by machine or on the bench by hand, for frankfurter rolls; make a strip. Place both on lightly greased pans.
5. Place the rolls in the proof box and allow full proofing. The rolls will more than double in size.
6. Bake at 410° F. for 15 to 20 minutes.

Hard-Roll Dough **4 Quarts or 1 Gallon**

Lb.	Oz.	INGREDIENTS	METHOD
–	4	Salt	Step 1: Use a dough hook. Mix the dry ingredients well into the cold water.
1	4	Granulated sugar	
–	8	Dry malt	
1	–	Whole eggs	
1	–	Oil (cottonseed/soybean)	
8	–	Cold water	
1	–	Yeast	Step 2: Break up into the above mixture and dissolve.
15	–	High-gluten flour	Step 3: Add to the above and mix until smooth, approximately 15 minutes.
28	–	Total Weight	

Hard-Roll Dough Production

(Vienna Bread, Club Rolls, Onion Rolls, Salt Rolls, and Poppy-Seed Rolls)

1. Place the dough in a closed container for proofing. (The closed container will prevent a crust from forming).

2. Allow the dough to proof for 1 hour. Fold over (punch) and proof for 30 minutes more.

3. Scale dough into presses at 4 lb. each and allow to rest for 15 minutes.

4. Press out into individual pieces and dust with rye flour. Allow pieces to rest about 5 minutes. Hard rolls are now ready to be made up.

5. Hard rolls can be made by hand or machine. Place the rolls face down on proof boards or paper-lined sheet pans. Place in proof box and proof until rolls are twice their original size. Remove from proof box.

6. Handling rolls gently, turn rolls face up on clean, dry, paper-lined pans or on a peel for hearth-baking.

7. Bake at 350° F. for approximately 20 minutes if pan-baked, or for 15 minutes if hearth-baked.

8. A good, steady flow of steam is important to the baking of this type of roll.

Raisin Bread **4 Quarts or 1 Gallon**

Lb.	Oz.	INGREDIENTS	METHOD
–	4	Salt	Step 1: Use a paddle. Mix to a smooth paste.
1	8	Granulated sugar	
–	12	Non-fat dry milk	
1	–	All-purpose shortening	
1	8	Whole eggs	Step 2: Add to the above in a slow, steady stream.
8	–	Cold water	Step 3: Add to the above and mix at a slow speed.
1	–	Yeast	Step 4: Break up and add to the above and dissolve.
14		Patent flour	Step 5: Add the flour to the above at a slow speed. DO NOT FULLY DEVELOP.
4	–	Raisins (plumped)	Step 6: Add the raisins to the above and complete mixing. Mix as little as possible so as not to smash the raisins.
32		Total Weight	

Raisin Bread Production

NOTE: Raisins should be soaked and drained before the dough is made.

1. Allow the dough to rest for 1½ hours in a closed container. Fold over from all sides (punch), re-cover, and let rest for 30 minutes more.

2. Scale the dough into 25 1 lb. 4 oz. loaves, and allow to rest. The loaves will be about the same size as for 18-oz. plain white loaves.

3. Make up the same as white bread.

4. Give a little more proof than for white bread – until it is ¼ inch above the pan.

5. Bake at 400°F. for 40 minutes.

6. Raisin breads may be washed with melted margarine when baked out.

NOTE: Remove the breads from the pans immediately after baking out. Place on a wire rack.

Sweet Rye Bread

4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
8	–	Cold water	Step 1: Use a dough hook. Mix these ingredients well in the cold water. *Do not mix too much.*
1	4	Rye-sour concentrate	
–	2	Granulated sugar	
–	4	Molasses	
–	4	All-purpose shortening	
3	–	Rye flour (white)	
–	8	Yeast	Step 2: Break up into the above and dissolve.
9	8	Clear flour	Step 3: Add to the above and mix until the dough is smooth and developed.
22	14	Total Weight	

Sweet Rye Bread Production

1. Allow the dough to rest for 30 minutes.
2. For bread, scale at 18 oz. each. For rolls, scale in 3 lb. presses. Allow to rest from 15 to 20 minutes.
3. Make up breads approximately 10" long with square ends.
4. Place the breads on proof boards that have been dusted with clean cornmeal. Place made-up breads in the proof box. Proof until doubled in size.
5. Preheat oven to 400°F. to 415°F. Let steam flow into oven in a slow, steady stream.
6. Wash the tops of the breads with water; cut the tops with 5 cuts.
7. Place the breads in the oven and let the steam run for about 5 minutes after the last bread has gone into the oven.

Jewish (Sour) Rye Bread **4 Quarts or 1 Gallon**

Lb.	Oz.	INGREDIENTS	METHOD
8 2 2	– 8 –	Cold water Rye-sour concentrate Rye flour (white)	Step 1: Use a dough hook. Dissolve the rye-sour concentrate and the rye flour in the cold water.
–	8	Yeast	Step 2: Break up into the above and dissolve.
9	–	Clear flour	Step 3: Add to the above and mix until dough is developed (12 minutes). *DO NOT OVERMIX.*

22 Total Weight

Jewish (Sour) Rye Bread Production

1. Allow the dough to rest for 1 hour in a closed container (wood bread box or dough trough).

2. Scale 19 18-oz. pieces for 1lb. loaves. Replace in the closed container for 15 minutes.

3. Make up the bread; place on proofing boards dusted with a mixture of cornmeal and rye flours.

4. Place the breads in the proof box; proof until 2½ times original size.

5. Wash the tops and sides of the breads with water. Cut three straight cuts in the top of each bread.

6. Fill the oven with steam 5 minutes before baking the bread. Steam the bread for 12 minutes after the last loaf has been placed in the oven.

7. Bake at 360°F. for 35 to 40 minutes.

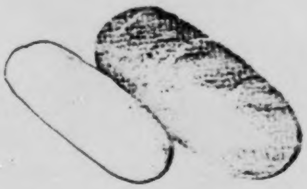
Note: Larger breads will require more cuts and a longer period of steam in the oven. Bake out all breads on a wire rack.

Pumpernickel (Sour) Bread **4 Quarts or 1 Gallon**

Lb.	Oz.	INGREDIENTS	METHOD
8 2 1 –	– 8 – 1	Cold water Rye-sour concentrate Pumpernickel flour Caramel color or baker's color	Step 1: Use a dough hook. Dissolve the rye-sour concentrate, pumpernickle flour, and caramel color in the cold water.
–	8	Yeast	Step 2: Break up into the above and dissolve.
10	–	Clear flour	Step 3: Add to the above and mix until dough is developed (12 minutes).
22	1	Total Weight	

Pumpernickel (Sour) Bread Production

Follow procedure for Jewish Rye Bread, page 28



Heavy Sour Rye ("Corn" Bread)

4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
8 3 4	– 8 –	Cold water Rye-sour concentrate Rye flour (white)	Step 1: Use a dough hook. Dissolve the rye-sour concentrate and the rye flour in the cold water.
	8	Yeast	Step 2: Break up into the above and dissolve.
6	–	Clear flour	Step 3: Add to the above and mix until dough is smooth to the touch. The dough should be soft and sticky.
22	–	Total Weight	

Heavy Sour Rye ("Corn" Bread) Production

1. Clean and thoroughly wet a large-size bread box. Place the dough in this box, wet the top of the dough and cover. Allow to rest for 20 minutes.
2. Prepare the oven ahead of time for this type of bread. The hearth should be thoroughly clean, the baking temperature should be 420° F., and the steam should be in the oven 5 minutes before baking the bread.
3. This is a special type of bread that is taken right from the wet bread box and placed on the heavily dusted oven peel in individual pieces. This is an art in itself and requires much practice.
4. After steam has been turned off, lower the temperature to 350° and bake until bread has a heavy, golden-brown crust top and bottom.

Whole Wheat Bread With Honey **4 Quarts or 1 Gallon**

Lb.	Oz.	INGREDIENTS	METHOD
8	–	Cold water	Step 1: Use a dough hook. Dissolve the ingredients in the water.
–	4	Salt	
–	12	Granulated sugar	
–	10	Non-fat dry milk	
–	4	Honey	
–	1	Dry malt	
12	8	Whole wheat flour	Step 2: Add the flour and mix until partially incorporated.
–	6	Yeast	Step 3: Break up into above and mix.
–	8	All-purpose shortening	Step 4: Add to the above and mix until smooth.
23	5	Total Weight	

Whole Wheat Bread With Honey – Production

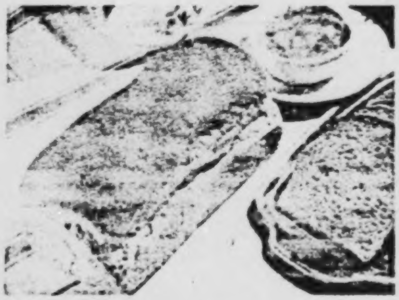
1. The approximate dough proofing times are:
   1st proof: 1 hr. 30 min.
   2nd proof: 30 min.

2. Scale dough into 22 1lb. 1 oz. pieces. Let the pieces rest for approximately 15 minutes before making them up into loaves.

3. Use same procedures as in making White Bread.

4. Bake at approximately 425° F. for about 30 minutes.

5. Be sure to remove the breads from the pans promptly, or they will become soggy.

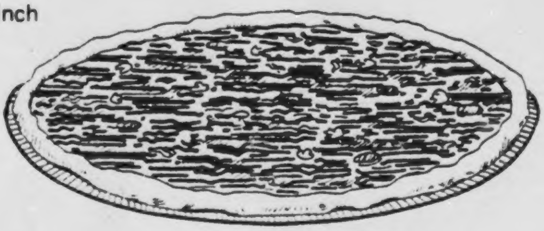


Pizza Dough **4 Quarts or 1 Gallon**

Lb.	Oz.	INGREDIENTS	METHOD
8	–	Cold water	Step 1: Use a dough hook. Mix only enough to dissolve and distribute the salt.
–	4	Salt	
7	–	Patent flour	
–	2	Yeast	Step 2: Add to the above and dissolve into the mix.
7	–	Patent flour	Step 3: Add to the above and mix until the dough is smooth.
22	6	Total Weight	

Pizza Dough Production

1. Let this dough rest for about 2 hours.
2. Scale dough into desired weights.
3. Stretch the rounded pieces into 8" or larger, ¼-inch thick discs.
4. Pour and spread the desired dressings on the dough.
5. Bake at 350°F. for about 8 to 10 minutes.



Water Bagels 4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
– 1 8	6 2 –	Salt Dry malt Cold water	Step 1: Use a dough hook. Dissolve the ingredients in the cold water.
–	8	Yeast	Step 2: Break up into the above and dissolve.
15	8	High-gluten flour	Step 3: Add to the above and mix until dough is strong and smooth.
25	8	Total Weight	

Water Bagel Production

1. Develop the dough in low speed. This is a stiff dough and develops friction in the developing stage. The dough must be stiff and smooth.
2. Allow the dough to rest for 1 hour in a warm place. Keep the dough covered to prevent a crust from forming.
3. Scale dough into seven 3lb. 8oz. presses. Allow the presses to rest for 15 minutes.
4. Press out. *Do not use flour or oil* when pressing out, or on the bench.
5. To boil bagels, prepare a solution of 4 gallons of water and 12 ozs. of dry malt, and bring to a rolling boil.
6. The bagels will sink to the bottom and then quickly rise to the top. Scoop out and place on a paper-lined sheet pan.
7. Bake at 450°F. until golden brown.

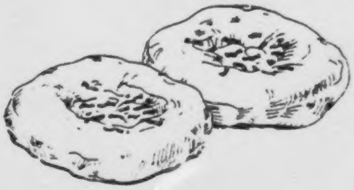
Bialy Rolls

4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
– – 8	4 6 –	Salt Granulated sugar Cold water	Step 1: Use a dough hook. Dissolve the salt and granulated sugar in the water.
–	10	Yeast	Step 2: Break up and add to the above.
12	12	High-gluten flour	Step 3: Add to the above and develop the dough well.
22	–	Total Weight	

Bialy Roll Production

1. Allow the dough to rise well, punch, and allow to rest another 30 minutes.
2. Scale into presses of 3 lb. 8 oz. each. Allow the presses to rest about 15 minutes before make-up.
3. Round up the pressed-out pieces and place on a lightly dusted proofing board. Give at least ¾ proof.
4. Using a flat-end rolling pin, flatten the center of the pieces of dough. Fill the centers with a little prepared onion mix.
5. Bake at 450°F. until they are light brown.
6. Onion "board" can be made from this dough.



Soft Pretzels **1 Quart Mix**

Lb.	Oz.	INGREDIENTS	METHOD
–	2	Yeast	Step 1: Use a dough hook. Let this mixed mass rest until double in size.
2	4	High-gluten flour	
1	–	Water	
1	–	Water	Step 2: Add to the above and mix to a smooth, stiff dough.
2	4	High-gluten flour	
–	1	Salt	
–	1	All-purpose shortening	

6 12 Total Weight

Soft Pretzels

1. Scale the dough into 4 lb. 8 oz. presses.
2. Make dough strips 8 to 10 inches long.
3. Proof for 25 minutes.
4. Dip into caustic solution made by dissolving 1 oz. sodium hydroxide in 1 quart of water.
5. Sprinkle coarse salt on the pretzels.
6. Bake at 400°F. until golden-brown.

Syrian Bread **1 Gallon Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
8	—	Cold water	Step 1: Use a dough hook. Mix until dough is smooth and stretchy. Note: Let the dough rest for 4 to 5 hours. Scale into 7 lb. pieces and let rest for 15 minutes. Press out into 9-oz. round individual pieces. Proof for 30 minutes. Roll each piece flat to 8-9 inches around. Proof to 2/3 again of original size. Bake at 450°F. until a pale brown.
—	3	Salt	
—	3	Dry malt	
15	—	High-gluten flour	
—	1½	Yeast	

23 7½ Total Weight

SECTION II – CAKES

Cake-Making Pointers

Ingredients

Shortening: The shortening used in cakes should have good creaming properties, neutral flavor, and be odor-free. Shortening should be white in color and plastic when used at temperatures between 70° and 75°F. Shortening is a tenderizer and adds to the qualities of the cake.

Flour: Be sure you are using the type of flour best suited to the product you are making. Use top-grade cake flour in cakes that are high in sugar and moisture content.

Sugar: The sugar used for all types of cakes should be of fine granulation to insure a fine, even grain and soft texture. Sugar is also a tenderizing ingredient and is partly responsible for the shortness and tenderness of the cake.

Salt: Salt should be of fine granulation to insure even and thorough distribution throughout the batter. Salt should be added with dry ingredients early in the mixing stage. Salt should be used in the approximate amount of 1 ounce to 10 pounds of batter.

Eggs: Frozen eggs should be used as quickly as possible once they have thawed. Eggs help form the supporting framework of the cake. In some cakes, eggs act as a leavening agent. Be sure the eggs are of high quality.

Flavor: Flavors are probably the most carelessly used ingredients. The proper flavor and the amount used is most important. It is very important that bakery products are consistent in flavor from day to day.

Dry Milk: Solids may be added directly to the batter when mixed, or they may be reconstituted with water and used the same as fresh, liquid milk. When reconstituting, use 4 ounces of dry-milk solids to 1 quart of water. For best results, refrigerate the reconstituted milk from two to three hours before using it. This will help maintain a cool batter.

Baking Powder: Cakes must have a balanced action. To keep fresh, baking powder and all other leavenings should be tightly covered and stored in a clean, dry, room.

Baking Soda: Baking soda should be sifted and thoroughly dissolved in a portion of the liquid before it is added to a mix. Small particles of undissolved baking soda will cause large holes throughout the cake's interior. Baking soda should also be kept tightly covered in a dry place.

Mixing Cakes

When mixing cakes it is very important to use balanced formulas. It is equally important to know how to scale and measure the ingredients correctly. When baking at high altitudes (as on mountains) the amount of leavening should be reduced due to the decreased atmospheric pressure. Where leavening is not used, the mixing time should be reduced slightly. For high-ratio formulas, the flour should be able to hold high percentages of sugar and moisture.

Proper mixing speed and timing are also very important. One should follow the formula instructions carefully. Mixing at too high a speed may cause an open and uneven grain to develop.

Batter temperature for layer and pound cakes should be between 70° and 75° F. To maintain this temperature in hot weather, use pre-chilled liquid ingredients.

Good-Taste Cake-Mix Cupcakes (For Beginners)

Lb.	Oz.	INGREDIENTS	METHOD
1	8	Granulated sugar	Step 1: Use a paddle for this mix. Mix these ingredients until soft and light. Scrape down the bowl.
–	½	Salt	
–	2	Non-fat dry milk	
1	–	All-purpose shortening	
1	–	Whole eggs	Step 2: Add to the above, in four stages. Mix well after each addition.
1	–	Water	Step 3: Pour both flavors into the water. Add to the above and mix in lightly.
–	½	Vanilla flavor	
–	½	Lemon flavor	
2	4	Cake flour	Step 4: Sift the flour and baking powder together into the above. Mix until the mix is smooth.
–	1½	Baking powder	
7	1	Total Weight	

Good-Taste Cake-Mix Cupcake Production

1. Be sure the mix is light and fluffy. The volume and texture of this mix depend upon the mixing process.
2. 1¼ oz. of batter to each 2-inch cup. For a 1-dozen-cup tray the batter will weigh 15 oz.
3. Bake cupcakes at 375°F. for 15 minutes with a closed oven door. If the oven door is left open during baking, the cupcakes will develop pointed peaks.
4. Remove the cupcakes from the pans while still warm.

Gold Cake (High-Ratio)

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
5 3	– 8	Cake flour High-ratio shortening	Step 1: Use a paddle. Mix 3 to 5 minutes. Scrape down the paddle and bowl at least once in this stage.
6 – – – 2	4 3 5 7 –	Granulated sugar Salt Baking powder Non-fat dry milk Water	Step 2: Add to the above and mix 3 to 5 minutes; scrape down at least once.
4 1 To	8 5 Taste	Whole eggs Water Flavor	Step 3: Scale the eggs, water, and flavor into a separate container; hand-blend with a wire whip. Add half to the above. Mix until smooth, scrape down, and mix until smooth again. Add the balance of the liquid ingredients and continue mixing for 3 to 5 minutes. Scrape down again to insure a smooth mix.
23	8	Total Weight	

Gold Cake (High-Ratio) Production

Mixing Speed: If a three-speed machine is used, use the slowest speed. When using a four-speed machine, use second speed.

Cake Shapes and Sizes

The chart below shows the important cake weights and pans sizes and their baking temperatures.

CAKE	WEIGHT	PAN SIZE	BAKING TEMPERATURE
Layer	7–8 oz.	7" round	375° – 390°F.
Layer	12–13 oz.	8" round	375° – 390°F.
Layer	1 lb. 8 oz.	10" round	375° – 390°F.
Layer	2 lb.	12" round	375° – 390°F.
½ Sheet	3 lb.	17" x 13"	375° – 385°F.
Sheet	6 lb.	17" x 25"	375° – 385°F.
Cupcakes	1¼ oz. each	2" cup	385° – 400°F. (closed oven door)

Fudge Cake (High-Ratio) **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
4	4	Cake flour	Step 1: Use a paddle. Mix 3 to 5 minutes. Scrape down the paddle and bowl at least once in this stage.
–	12	Cocoa	
3	8	High-ratio shortening	
6	4	Granulated sugar	Step 2: Add to the above and mix 3 to 5 minutes, scraping down at least once.
–	3	Salt	
–	1½	Baking soda	
–	3	Baking powder	
2	–	Water	
–	7	Non-fat dry milk	
4	8	Whole eggs	Step 3: Scale the eggs, water and flavor into a separate container, and blend with a wire whip. Add half to the above. Mix until smooth, scrape down, mix until smooth again. Add the balance of the liquid ingredients and continue mixing for 3 to 5 minutes. Scrape down again to insure a smooth mix.
1	5	Water	
To	Taste	Flavor	
23	7½	Total Weight	

Fudge Cake (High-Ratio) Production

Mixing Speed: If a three-speed machine is used, use the slowest speed. When using a four-speed machine, use second speed:

Cake Shapes and Sizes

The chart below shows the important cake weights and pans sizes and their baking temperatures.

CAKE	WEIGHT	PAN SIZE	BAKING TEMPERATURE
Layer	7–8 oz.	7" round	360° – 375°F.
Layer	12–14 oz.	8" round	375° – 390°F.
Layer	1 lb. 8 oz.	10" round	375° – 390°F.
Layer	2 lb.	12" round	375° – 390°F.
½ Sheet	3 lb.	17" x 13"	375° – 385°F.
Sheet	6 lb.	17" x 25"	375° – 385°F.
Cupcakes	1¼ oz. each	2" cup	385° – 400°F. (closed oven door)

Deluxe Gold Cake

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
3 6 — — — 5 2	4 4 3 5 8 — 4	Liquid shortening Granulated sugar Salt Baking powder Non-fat dry milk Cake flour Water	Step 1: Use a paddle for mixing. Scale the liquid shortening into the bowl. Scale the remainder of the ingredients in this step, in the order listed, into the bowl. Mix at low speed for 3 to 5 minutes in this step. Scrape down paddle and bowl at least once in this step.
4	8	Whole eggs	Step 2: Add to the above. Mix for 3 minutes. Scrape down paddle and bowl.
1 To	10 Taste	Water Flavor	Step 3: Add to the above and mix for 3 minutes.
23	14	Total Weight	

Deluxe Gold Cake Production

Mixing Speed: If a three-speed machine is used, use the slowest speed. When using a four-speed machine, use second speed.

Cake Shapes and Sizes

The chart below shows the important cake weights, and pans sizes and their baking temperatures.

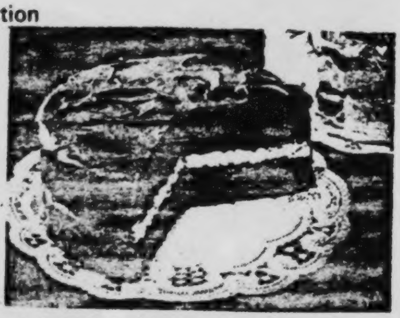
CAKE	WEIGHT	PAN SIZE	BAKING TEMPERATURE
Layer	7–8 oz.	7" round	360° – 375°F.
Layer	12–13 oz.	8" round	360° – 375°F.
Layer	1 lb. 8 oz.	10" round	360° – 375°F.
Layer	2 lb.	12" round	360° – 375°F.
½ Sheet	3 lb.	17" x 13"	360° – 375°F.
Sheet	6 lb.	17" x 25"	360° – 375°F.
Cupcakes	1¼ oz. each	2" cup	380° – 390°F.

Deluxe Fudge Cake **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
3	4	Liquid shortening	Step 1: Use a paddle for mixing. Scale the liquid shortening into the bowl. Scale the remainder of the ingredients in this step, in the order listed, into the bowl. Mix at low speed for 3 to 5 minutes in this step. Scrape down the paddle and bowl at least once in this step.
6	4	Granulated sugar	
–	12	Cocoa	
–	3	Salt	
–	1	Baking soda	
–	3	Baking powder	
–	8	Non-fat dry milk	
4	4	Cake flour	
2	4	Water	
4	8	Whole eggs	Step 2: Add to the above. MIx for 3 minutes. Scrape down paddle and bowl.
1	12	Water	Step 3: Add to the above and mix for 3 minutes.
To	Taste	Flavor	

24 – Total Weight

Deluxe Fudge Cake Production



Mixing Speed: If a three-speed machine is used, use the slowest speed. When using a four-speed machine, use second speed.

Cake Shapes and Sizes

The chart below shows the important cake weights, and pans sizes and their baking temperatures.

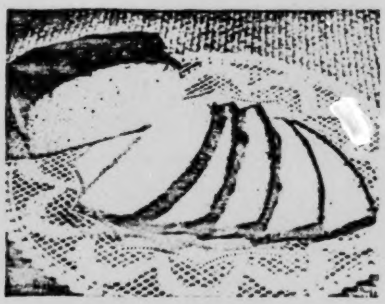
CAKE	WEIGHT	PAN SIZE	BAKING TEMPERATURE
Layer	7–8 oz.	7" round	360° – 375°F.
Layer	12–13 oz.	8" round	360° – 375°F.
Layer	1 lb. 8 oz.	10" round	360° – 375°F.
Layer	2 lb.	12" round	360° – 375°F.
½ Sheet	3 lb.	17" x 13"	360° – 375°F.
Sheet	6 lb.	17" x 25"	360° – 375°F.
Cupcakes	1¼ oz. each	2" cup	380° – 390°F.

Yellow Pound Cake (High-Ratio)

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
5 3	– 8	Cake flour High-ratio shortening	Step 1: Use a paddle. Mix for 3 minutes. Scrape down the paddle and bowl at least once in this step.
6 – 2 –	– 3 4 5	Granulated sugar Salt Water Non-fat dry milk	Step 2: Add to the above, and mix for 6 minutes. Scrape down at least once in this step.
3 To	8 Taste	Whole eggs Flavor	Step 3: Put the eggs and flavor together in one container. Add half to the above, mix until smooth, scrape down, mix until smooth again. Add the balance of the eggs and flavor, mix for 5 minutes. Scrape down again. Mix until smooth.
20	12	Total Weight	

Yellow Pound Cake Production



Mixing Speed:

Use third speed for steps 1 and 2. For third step use second speed.

Baking Temperature:

1-pound loaf at 350°F.
3-pound loaf at 330°F.

Baking Time:

1-pound loaf, 1 hour to 1 hour and 15 minutes.
3-pound loaf, 2 hours.

Golden Pound Cake **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
3 6 – – 5	8 – 3 5 –	Liquid shortening Granulated sugar Salt Non-fat dry milk Cake flour	Step 1: Use paddle for mixing. Scale liquid shortening into the mixing bowl. Scale the remainder of the ingredients in this step, in the order listed, into the bowl.
3 2 to	8 4 Taste	Whole eggs Water Flavor	Step 2: Add half the combined liquid ingredients to above. Mix at third speed for about 4 minutes. Scrape down at the end of this stage.
			Step 3: Add half the remaining liquids and continue mixing at third speed for about 3 minutes. Add the remaining liquids; mix at second speed for 3 minutes.
20	12	Total Weight	

Golden Pound Cake Production

Mixing Speed:
Use third speed for steps 1 and 2. For third step use second speed.

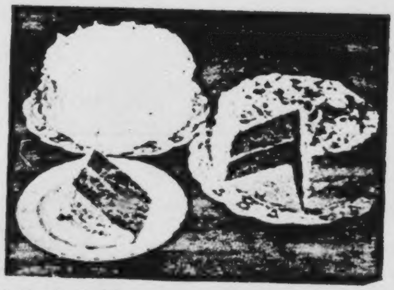
Baking Temperature:
1-pound loaf at 350°F.
3-pound loaf at 330°F.

Baking Time:
1-pound loaf, 1 hour to 1 hour and 15 minutes.
3-pound loaf, 2 hours.

Deluxe Spice Cake **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
2 5 – – – – 5 2	8 12 3 3 5 10 – 4	Liquid shortening Granulated sugar Salt Pumpkin spice mix Baking powder Non-fat dry milk Cake flour Water	Step 1: Use paddle for mixing. Scale liquid shortening into bowl. Scale the remainder of the ingredients in this step, in the order listed, into the bowl. Mix at second speed on a four-speed machine. Mix for 5 minutes. in this step. Scrape down the paddle and bowl at least once.
3	4	Whole eggs	Step 2: Add all the eggs to the above. Mix for 3 minutes. Scrape down bowl.
2 1	8 –	Water Molasses (dark)	Step 3: Add to the above and mix for 3 minutes.
23	9	Total Weight	

Deluxe Spice Cake Production



Mixing Speed: If a three-speed machine is used, use the slowest speed. When using a four-speed machine, use second speed.

Cake Shapes and Sizes

The chart below shows the important cake weights, and pans sizes and their baking temperatures.

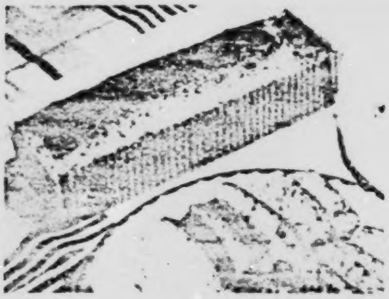
CAKE	WEIGHT	PAN SIZE	BAKING TEMPERATURE
Layer	7–8 oz.	7" round	360° – 375°F.
Layer	12–13 oz.	8" round	360° – 375°F.
Layer	1 lb. 8 oz.	10" round	360° – 375°F.
Layer	2 lb.	12" round	360° – 375°F.
½ Sheet	3 lb.	17" x 13"	360° – 375°F.
Sheet	6 lb.	17" x 25"	360° – 375°F.
Cupcakes	1¼ oz. each	2" cup	380° – 390°F.

French Nut Cake **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
2	–	Granulated sugar	Step 1: Use a paddle. Mix until paste is blended into the other ingredients and is soft.
2	8	All-purpose shortening	
–	1	Salt	
1	–	Kernel or macaroon paste	
2	8	Whole eggs	Step 2: Add to the above and blend in until light and fluffy. Remove the mixing bowl from machine. Remove paddle; clean off mix into bowl.
3	8	Dry crumbs (bun or coffee cake)	
1	6	Ground nuts	
1	–	Cake flour	
2	–	Egg whites	Step 3: Use a small bowl with a whip. Whip egg whites and add granulated sugar in a slow stream. Whip until stiff. Fold into the above mix by hand, until fully incorporated into mix.
1	8	Granulated sugar	
17	7	Total Weight	

French Nut Cake Production

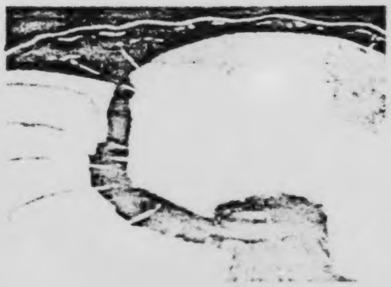
1. Be sure the mix is light and fluffy.
2. A lightly baked short dough may be used as a base. A light coating of jam or jelly may be added to the bottom before the mix is dropped out into the pan.
3. Use a high-sided pan for this cake.
4. Bake at 360°F.
5. When the cake is cool enough, it may be garnished with a sprinkle of ground nuts, dusted with confectionery sugar, or it may be iced.



Kosher Pound Cake **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
5 5 – –	– – 1 3	Cake flour All-purpose shortening Vanilla Salt	Step 1: Use a paddle. Blend together thoroughly.
5 5	– –	Whole eggs Granulated sugar	Step 2: Use a whip. Whip as for sponge cake. Add slowly to the above, folding in by hand.
			NOTE: Scale into loaf pans lined with paper liner. Bake at 350°F.

20 4 Total Weight



Cake Brownies Basic Mix

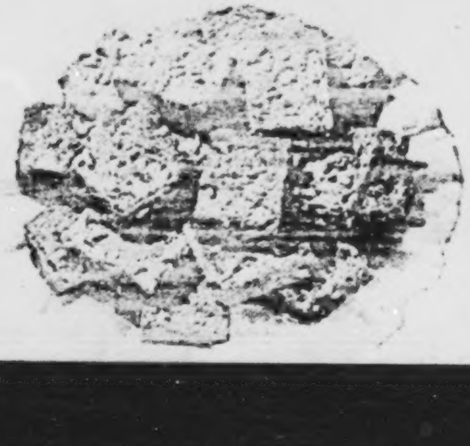
Lb.	Oz.	INGREDIENTS	METHOD
2 — 2 —	8 ½ — 14	Granulated sugar Salt All-purpose shortening Chocolate fudge base	Step 1: Use a paddle. Blend well until light and fluffy. Scrape down the paddle and the bowl, including the very bottom.
2 —	8 1	Whole eggs Vanilla	Step 2: Add the vanilla to the eggs. Add to the above in four stages and blend well after each addition.
1 1	— —	Cake flour Patent flour	Step 3: Sift the flours and add to the above. Mix until flour is absorbed into the above mix.
1	8	Walnuts or pecans	Step 4: Add to the above mix. Mix until smooth and light.

11 7½ **Total Weight**

Cake-Brownies Production

This is a rich, cake-type brownie. It is very popular with all age groups and is a leading item in most bakeries. Nutritious and filling as a snack.

1. Drop the mix out into a regular-size (18" x 26") paper-lined sheet pan. The sides should be greased.
2. Bake at 360°F. Be careful not to overbake. Overbaking will cause the brownies to be tough and dry.
3. This brownie sheet may be egg-washed before baking. No icing will be needed, as it is rich enough as is.
4. Fudge base may be replaced by 9 oz. of cocoa and 3 oz. of shortening. Sift the cocoa with the flour and add the extra shortening to the shortening in the mix in step #1.



Wonder Cake **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
–	8	Almond or macaroon paste	Step 1: Use a paddle. Mix paste until lump-free and smooth. Blend all the ingredients in this step together. Scrape down paddle and bowl twice in this step.
2	–	Granulated sugar	
2	–	All-purpose shortening	
1	–	Margarine	
–	½	Salt	
–	8	Patent flour	
2	–	Whole eggs	Step 2: Add the eggs to the above in 4 stages and blend well after each addition.
1	–	Yolks	
1	–	Water	Step 3: Dissolve the vanilla in the water, add to the above, and mix lightly.
–	1	Vanilla	
3	–	Cake flour	Step 4: Sift together, and add to the above mix. Mix at medium speed until smooth. Remove bowl from machine.
–	1½	Baking powder	
1	8	Egg whites	Step 5: Whip to wet-peak stage and fold into the above mix by hand.
–	14	Granulated sugar	
15	9	Total Weight	

Wonder Cake Production

1. Melt 1 lb. 8 ozs. of sweet chocolate. Pour the chocolate down the side of the bowl, keeping it confined to one spot. As you scoop out the mix into pans, pick up a little of the chocolate.
2. Bake in paper-lined loaf pans.
3. Baking temperature 360°F.
4. Baking time: 30 to 45 minutes.

Angel Food Cake

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
6	–	Egg whites	Step 1: Use a whip. Whip the egg white to the wet-peak stage. Use second speed on a four-speed machine.
1	8	Granulated sugar	Step 2: Scale these ingredients on a clean piece of paper. Add to the above in a slow stream while the machine is running. Mix to a medium peak.
–	1½	Cream of tartar	
–	½	Salt	
–	1	Vanilla	Step 3: Add to the above and mix in.
2	2	Cake flour	Step 4: Sift together, add in a slow stream to the above mix. Use slow speed, mix only about 15 seconds. Remove bowl from machine and mix by hand, making sure to incorporate all the flour.
4	8	Granulated sugar	
14	5	Total Weight	

Angel Food Cake Production

Note: *Watch the whipping of the egg white: angel-food-cake failures are due to improper whipping.* The egg white should be on the wet side; overwhipping will cause the cake to become rubbery and lose volume.

1. Bake in moistened tube-type pans.
2. Bake at 325°F. to 350°F.
3. Baking time: 50 to 60 minutes.
4. When removing from the oven, turn cakes over on clean, paper-lined sheet pans. Do *not* remove baking pans until cakes are cooled off.

Dark Fruit Cake **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
– –	12 4	Almond or macaroon paste Whole eggs	Step 1: Use a paddle. Blend well to a smooth paste. There should be *no lumps*.
1 1 – 3 –	8 8 ¾ – 8	Granulated sugar Brown sugar Salt All-purpose shortening Patent flour	Step 2: Add to the above and blend till light and fluffy. Scrape down the paddle and bowl twice in this step.
3	–	Whole eggs	Step 3: Add the eggs to the above, in four stages. Blend well after each addition.
–	8	Molasses	Step 4: Add to the above and blend in well.
–	1	Pumpkin spice mix	Step 5: Add to the above until well distributed throughout the mix.
1 1 –	8 4 ¼	Patent flour Cake flour Baking powder	Step 6: Sift together and add to the the above mix. Scrape down paddle and bowl thoroughly.
1	8	Walnuts or pecans	Step 7: Add to the above and mix. Do not mix too long – 30 seconds is enough.
15	6	Total Weight	

Fruit and Preparation For Dark Fruit Cake

Lb.	Oz.	INGREDIENTS	METHOD
7 5 8	8 – –	Raisins, black or gold Cherries (glazed) red and green Mixed double-diced fruit	Step 1: Wash the fruit in cool water to remove the excess syrup or sugar.
1 1	8 –	Honey Rum flavor	Step 2: Soak the above fruit in the honey and rum flavor. Let stand overnight. Drain all excess liquid.
23	–	Total Weight of fruit mix	Step 3: Add the fruit and mix in by hand.

Baking: Use a round tube pan. Bake at 325°F. to 350°F. for a 9" round tube pan. Use a slightly higher temperature for smaller cakes. Bake until solid to the touch.

Glaze for fruit cake

Lb.	Oz.	INGREDIENTS	METHOD
2 1	– –	Glucose or corn syrup Water	Boil together, let cool, and apply to the baked cakes while cakes are warm.
3		Total Weight of glaze	

Sour-Cream Cake

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
4	–	Granulated sugar	Step 1: Use a paddle. Blend these ingredients together at second speed for 4 minutes. Scrape down paddle and bowl at least once.
2	–	Margarine	
2	–	High-ratio shortening	
–	1	Salt	
4	–	Whole eggs	Step 2: Add to the above and blend in well.
6	–	Cake flour	Step 3: Sift together. Add to the above and mix until smooth. Scrape down paddle and bowl at least once.
–	1½	Baking powder	
–	¾	Baking soda	
4	–	Sour cream	Step 4: Add to the above and mix until smooth. Scrape down paddle and bowl and mix for 1 minute, making sure mix is smooth.
22	3¼	Total Weight	

Sour-Cream Cake Filling and Topping

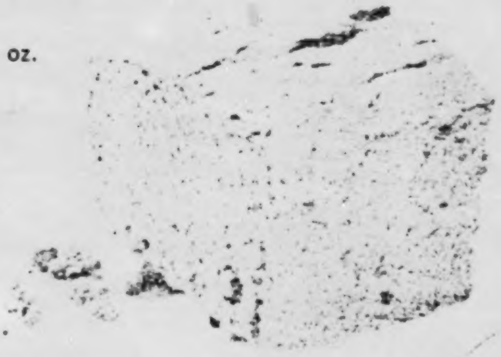
Lb.	Oz.	INGREDIENTS	METHOD
3	–	Brown sugar	Step 1: Use a paddle. Blend together only enough to form a balanced mix.
1	–	Walnut pieces	
1	–	Chocolate chips	
–	1	Cinnamon	
–	1	Cocoa	
5	2	Total Weight	

Note: For 1-pound loaves, put 8 oz. of sour-cream cake batter in the pan.
Sprinkle with the filling mix.
Put 8 oz. more batter in the pan and again sprinkle with the same filling mix (now it becomes a topping).
Bake at 340°F. for approximately 45 minutes.

Honey Cake

Lb.	Oz.	INGREDIENTS	METHOD
6	–	Honey	Step 1: Use a paddle. Mix together at low speed for 5 minutes.
1	8	Brown sugar	
–	2	Baking soda	
2	–	Whole eggs	
2	–	Cold water	Step 2: Add to the above and mix only slightly.
4	8	Rye flour (white)	Step 3: Sift the flour together and add to the above. Mix until smooth.
1	8	Patent flour	
2	–	Cottonseed oil	Step 4: Add slowly to the above and mix at the slowest speed until smooth.
–	3	Grated orange rind or diced peel	
19	13	Total Weight	

1. Use paper-lined loaf pans.
2. Scale into 1- or 2-lb. loaves.
3. Sprinkle sliced blanched almonds on the tops.
4. If orange rind or peel are not on hand, substitute 1 oz. orange flavor.
5. Bake at 320°F.



Sponge Cake (Plain) **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
8	–	Granulated sugar	Step 1: Use a whip. The eggs should be at room temperature. Whip these ingredients until light and dry. The whip marks should show.
–	1	Salt	
1	–	Corn syrup	
9	–	Whole eggs	
1	–	Hot water	Step 2: Use second speed and add to the above in a slow, steady stream.
–	8	Cool water	Step 3: Add the flavor to the water and fold in by hand.
–	4	Flavor — lemon or almond	
8	8	Cake flour	Step 4: Sift together and fold into the above. Do not overmix: mix only until the flour is thoroughly mixed into the batter. Be sure the mix at the bottom of bowl is not lumpy.
–	2	Baking powder	
28	7	Total Weight	

Plain Sponge Cake Production

1. The purpose in using hot water is to keep the mix warm; this makes for more even distribution of the ingredients.
2. This cake mix should not be allowed to stand after mixing, or it will lose the air that was incorporated when mixed.
3. Bake at 365°F. to 375°F.
4. This mix can be made into layers, cupcakes, and loaf cakes.
5. Remember, bake *as soon as the pans have been filled.*

REMEMBER!

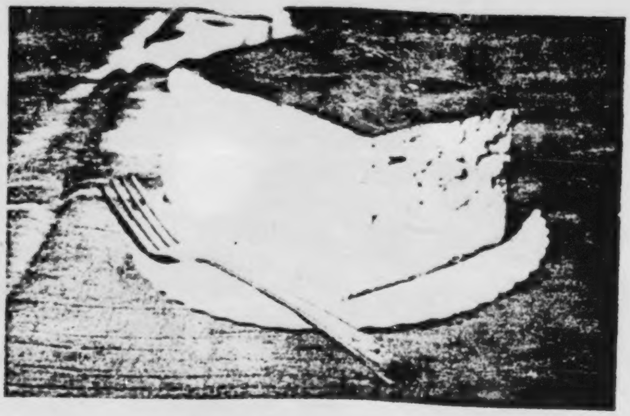
Almond Sponge Cake **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
3	–	Almond or macaroon paste	Step 1: Use a paddle. Break up the paste; add the eggs slowly. Mix until the paste is smooth.
2	–	Whole eggs	
4	–	Granulated sugar	Step 2: Use another bowl and whip. Whip these ingredients until light. Add the above paste mix gradually. Use only second speed to whip light and fluffy.
–	1	Salt	
2	–	Whole eggs	
2	–	Egg yolks	
3	8	Cake flour	Step 3: Sift the flour. Remove the bowl from the machine and fold the flour in by hand.
16	9	Total Weight	

Almond Sponge Cake Production

1. Pre-heat the oven to 350°F.
2. Use loaf pans with a paper liner.
3. Fill the loaf pans half full with the mix.
4. The cakes are baked when they spring back to the touch, especially in the center.

Cheese Cake



Tips On Making Cheese Cake

MIXING:

1. Mix cheese until smooth, then add your dry ingredients.
2. Cheese cake should never be mixed above medium speed.
3. All liquids should be added last.

BAKING:

1. Always bake cheese cakes at low temperatures, NEVER above 350°F. The ideal temperature range is between 315° and 325°F.

2. Low temperatures will prevent raw cake centers.

3. Baking at low temperatures will also prevent [illegible] during baking, and consequent shrinkage when cooling.

4. A steam-bath baking will not be necessary when baking at low temperatures (below 350°F.).

5. Double-pan baking often helps in baking cheese cake. It will keep the bottom from drying out and burning. Place filled pans on sheet pan. Add water to sheet pan until ¼ inch deep.

Cream Cheese Cake (100%)

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
10	–	Cream cheese	Step 1: Use a paddle. Use *slow* speed. Do not overmix – mix only until smooth.
2	8	Granulated sugar	
–	1	Salt	
–	1	Lemon flavor	
4	–	Whole eggs (Fresh if possible)	Step 2: Add to the above in three stages. Scrape down paddle and bowl after each addition.
1	–	Light cream	
17	10	Total Weight	

100% Cream Cheese Cake Production

1. Use layer-cake pans in sizes from 7" to 10".
2. Prebake the short-dough bottoms. Let cool and grease the sides.
3. Line the sides with short dough; trim off any overhanging dough.
4. Fill the pans with the cream-cheese mix almost to the top.
5. Place pans on the hearth. Bake at 450°F. *only* until the cakes start to rise and the edges of the cakes take on a light brown color (should be approximately 20 minutes).
6. Remove from the oven and let cool for about 10 to 15 minutes.
7. Run a bowl knife approximately ½ inch down between the pan and the short dough. The cakes will settle evenly.
8. Place cakes in their pans on sheet pan. Add water to sheet pan. Put back into a 350°F. oven. Bake for about 15 to 20 minutes. The center will feel firm and the edges will be brown.
9. The cakes should be allowed to cool for about 2 hours before being turned out of the pans.

Rich Cheese Cake

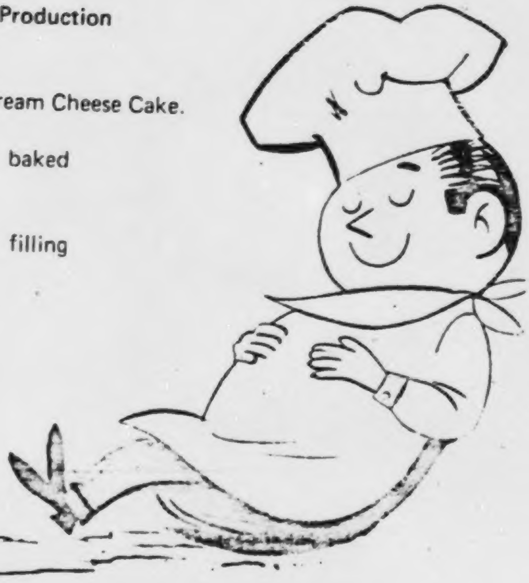
Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
5	–	Cream cheese	Step 1: Use a paddle. Mix at low speed until smooth and lump-free. Scrape down paddle and bowl.
5	–	Baker's cheese	
–	4	Corn starch	
2	12	Granulated sugar	Step 2: Add to the above and mix smooth. Scrape down paddle and bowl.
–	½	Salt	
–	½	Lemon powder	
–	6	Margarine	
2	–	Whole eggs	Step 3: Add to the above very slowly. Scrape down after this step.
–	10	Yolks	
–	12	Cold water	Step 4: Add to the above mix until a smooth paste. Scrape down.
16	13	Total Weight	

Rich Cheese Cake Production

Note: Use same baking procedures as for the 100% Cream Cheese Cake.

1. Place some cherry or pineapple filling on the baked bottom before pouring in the cheese mix.
2. Cakes can be topped with cherry or pineapple filling when removed from pans.



California Cheese Cake

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
7	8	Baker's cheese	Step 1: Use a paddle. Mix 3 minutes at low speed. Scrape down the paddle and bowl very well.
1	4	Patent flour	
–	1¼	Salt	
–	1	Vanilla	
1	4	Whole eggs	Step 2: Add to the above in three equal portions and mix 3 minutes each time at low speed. Scrape down thoroughly.
4	8	Liquid skim milk	Step 3: Heat only until little bubbles come to the top. Add to the above very slowly. Mix at low speed. Scrape down three times in this step.
–	5	All-purpose shortening (melted)	
1	2	Water	Step 4: Bring water and sugar to a rolling boil. Add to the whipping egg whites very slowly in high speed. Reduce to medium speed. Whip for 5 minutes.
3	12	Granulated sugar	
2	8	Egg whites	
22	5¼	Total Weight	Step 5: Fold the above cheese mixture into the egg white-sugar mixture by hand.

California Cheese Cake Production

1. Grease and line the pans with toasted cake crumbs.
2. Fill pans a little more than ¾ full.
3. Bake at 280°F. to 290°F.
4. Use pans that measure about 9" in diameter and 3" in height.
5. Place on sheet pans and add water.
6. Bake for approximately 1 hour and 10 minutes.
7. *Do not let mix stand.* Cakes must be baked immediately, or a breakdown in the cake structure will occur.

Dutch Cheese Cake **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
2 1 –	12 8 1	Granulated sugar High-ratio shortening Salt	Step 1: Use a paddle. Blend together 4 minutes at low speed.
6 – –	8 8 1	Baker's cheese Patent flour Vanilla	Step 2: Add to the above and mix until smooth. Scrape down the padd[illegible]nd bowl.
2	8	Whole eggs	Step 3: Add to the above slowly. Mix until smooth. Scrape down at least once.
2	–	Liquid milk	Step 4: Add to the above and mix until smooth.

15 14 Total Weight

Dutch Cheese Cake Production

1. Line the bottom of cheese cake (high-wall) pans with short dough. Bake to a golden brown. Let cool.
2. Spread pineapple filling on the cool baked short dough.
3. Fill with the cheese mixture to ¾ of the pan's height.
4. Sprinkle the tops with a mixture of ground nuts and cinnamon.
5. Place on sheet pans. Add water.
6. Bake at 350°F. until the centers are fully baked. Cake will feel solid when touched with the fingers.

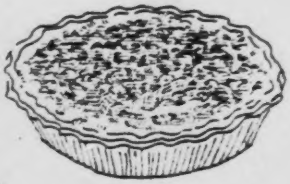
Cheese Pie

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
10 3	– –	Baker's cheese High-ratio shortening	Step 1: Use a paddle. Mix together until smooth.
4 – – –	– 4 10 1	Granulated sugar Corn starch Patent flour Salt	Step 2: Add to the above and mix until smooth. Scrape down the paddle and bowl.
3 –	8 1	Whole eggs Vanilla	Step 3: Add to the above in a slow stream. Mix until smooth. Scrape down paddle and bowl.
2	–	Liquid milk	Step 4: Add to the above and mix until milk is thoroughly incorporated and is smooth.
23	8	Total Weight	

Cheese Pie Production

1. Fill pre-baked pie shells almost to the top.
2. Cherry or pineapple filling may be used at the bottom and the top.
3. Bake at 350°F. on a sheet pan until the tops are golden-brown.



Sour-Cream Cheese Cake

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
5	–	Baker's cheese	Step 1: Use a paddle. Blend together at medium speed.
–	12	Patent flour	
–	6	Cornstarch	
1	12	Granulated sugar	
–	1	Salt	
–	4	Non-fat dry milk	
1	4	Egg yolks	Step 2: Add to the above in two stages. Blend in well each time.
1	–	Water	Step 3: Add the flavors to the water. Add to the above in two stages. Blend in well and scrape down at least once in this step.
–	1	Vanilla	
–	1	Lemon powder	
3	4	Sour cream (Imitation – non-dairy)	Step 4: Add to the above in two stages. Blend in well.
2	–	Egg whites	Step 5: Whip to the wet-peak stage. Fold into the above by hand.
2	–	Granulated sugar	
17	13	Total Weight	

Sour-Cream Cheese Cake Production

1. For layer-cake pans, grease pans and line the bottoms and sides with dry cake crumbs.
2. Place on sheet pans; add water.
3. Bake at 385°F.

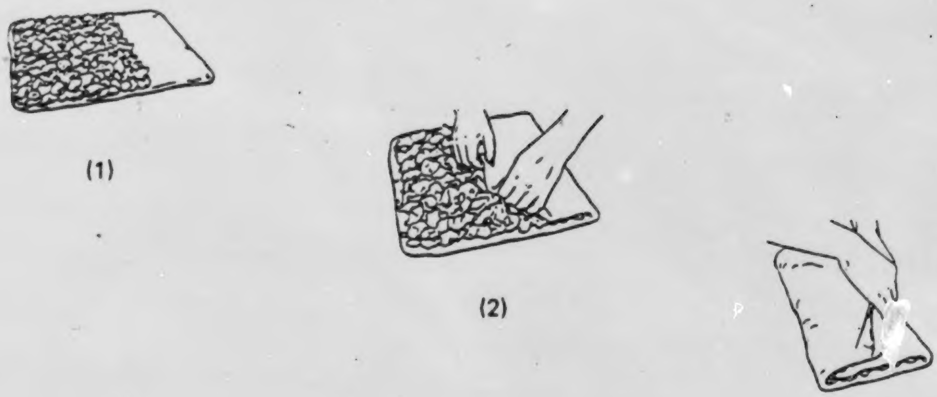
This cake may be baked without water in the sheet pans; in that case bake at 350° F. The cake will come out dryer.

Sour-Cream Cheese Cake Topping

Lbs.	Ozs.	Ingredients	Method
3	12	Sour Cream (non-dairy)	Use a paddle. Blend together until smooth.
–	5	Confectionery sugar	
–	1	Vanilla	
4	2	Total Weight	

1. This topping may be used only after the cakes have cooled off.
2. For contrast, crumbs of dry chocolate cake may be sprinkled on top.

SECTION III – PASTRIES



(1)

(2)

(3)

Pastries — Roll-In Process

Quality of Ingredients:

Any sweet yeast dough must be made of quality ingredients if it is to yield the desired product.

Handling ROLL-IN Process:

1. Scale dough into blocks of approximately 10 pounds each.

2. Place each block on a flour-dusted pan; roll out to full size of a standard sheet pan.

3. Retard for at least 15 minutes.

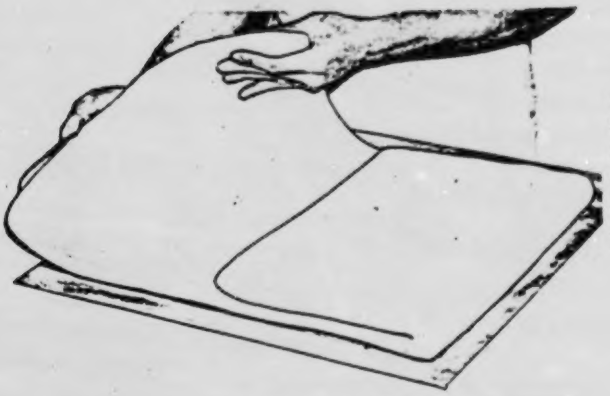
4. Remove from retarder and apply bits of softened margarine to two-thirds of the area. (See picture #1 above.) Return to the retarder for 20 minutes.

5. Remove from retarder and fold over into three folds, as illustrated in pictures #2 and #3.

6. Return dough to retarder for 20 minutes.

7. Remove dough from retarder and roll again to full size of pan. Then fold into three folds. This time return to retarder until ready to make up.

NOTE: Puff-pastry dough will require four 4-folds in all, resting in retarder after each folding operation.

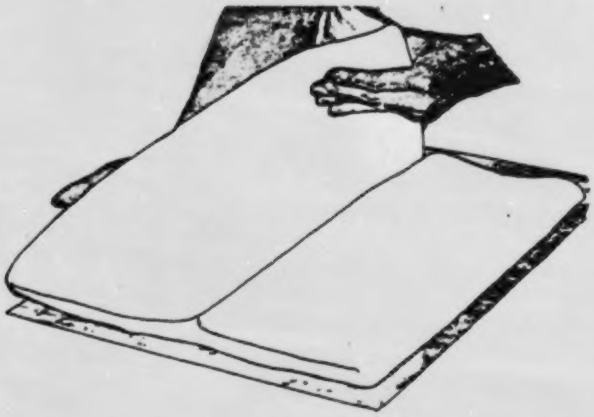


◀ THE THREEFOLD

After the dough has been rolled out or sheeted, fold one-third of the dough over the center one-third. Remove flour dust and fold the remaining one-third over the center folds, thus giving three layers of rolled dough.

THE FOURFOLD ▶

After the dough has been rolled out or sheeted, fold one end of the dough into the middle. Fold opposite end to the middle. Then fold one folded section over the other, thus giving four layers of rolled dough. Be sure to brush away loose dusting flour between each fold.



General Rules for Pastries

1. MAKE-UP: Cut and shape into the desired pieces, shapes and forms.

2. PROOF: Proof until the product is about double in size. Temperature of dry heat should be 85° to 90°F. and the humidity 80% to 85%. These are the best conditions for most sweet-dough goods.

3. BAKE: Bake most hand-sized pastry at 390°F. Larger size products made from a pastry-type dough will require a slightly lower temperature. When removing from the oven, most sweet doughs are usually washed with a hot-glaze type of syrup.

NOTE: The above does not apply to Puff Pastry, as it needs no proofing.

Basic Sweet Dough 4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
4 4 – 1 12 6 To	– – 4 – – – Taste	Granulated sugar Margarine Salt Non-fat dry milk Patent flour Pastry flour Flavor: orange, lemon, or coffee	Step 1: Use a paddle. Place all the ingredients in the bowl. Mix at slow speed.
8 3 2	– – –	Cold water Whole eggs Yeast	Step 2: Break up the yeast into the above mixture and continue mixing. Add the water and eggs. Continue mixing at medium speed until the dough is developed and pulls free from the sides of the bowl.
40	4	Total Weight	

Basic Sweet Dough Production

1. This formula can be used for sweet buns and sweet rolls.
2. Bring the dough from the mixer and let rise to three quarters of the normal size of the dough.
3. Scale into desired pieces and let rest.
4. For best results retard the scaled dough pieces while making up into buns or rolls.
5. Proof at 90°F. and humidity of 85%. Pieces should about double in size.
6. Bake at 375°F.

Rich Danish Pastry Dough

4 Quarts or 1 Gallon

Lb.	Oz.	INGREDIENTS	METHOD
3	–	Granulated sugar	Step 1: Use a paddle. Place all the ingredients in the bowl. Mix at slow speed.
3	–	Margarine	
–	7	Salt	
12	–	Patent flour	
6	–	Pastry flour	
1	–	Non-fat dry milk	
To	Taste	Flavor: lemon, orange, coffee	
4	–	Whole eggs	Step 2: Break up the yeast into the above and continue mixing. Add the water and eggs and continue mixing at medium speed for 4 to 5 minutes.
8	–	Water	
2	–	Yeast	
10	–	Roll-in margarine	Step 3: This is reserved for the roll-in. *Do not add to the above.*
49	7	Total Weight	

Rich Danish Pastry Dough Production

1. Divide the dough into approximately 10-pound pieces. Place on a clean, flour-dusted sheet pan and roll out the full length and width of the pan. Place in the retarder for 30 minutes.

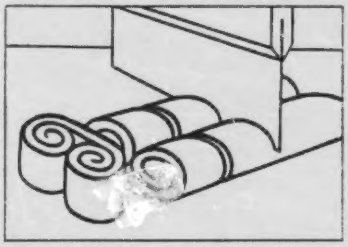
2. Fold in the margarine. Give the dough a total of 3 rolls, with 3 folds to each roll. The dough should be retarded 20 to 30 minutes between each roll-and-fold operation.

3. For best result this dough should be allowed to rest in the retarder overnight.

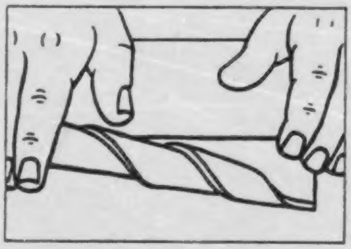
4. Make up into desired pieces.

5. Proof until pieces are double in size.

6. Bake at 390° to 400°F.



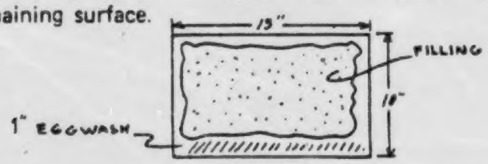
DOUBLE CINNAMON DANISH ROLL



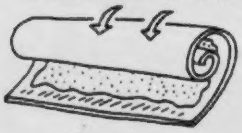
FILLED TWIST

Regular Coffee Cake

1. Brush bottom 1-inch of sheet with eggwash.
2. Spread any type of oven-proof fruit or pie filling across remaining surface.

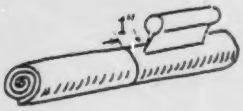


3. Roll the filled sheet toward you into a tight cylinder and press firmly to seal. Roll should be approximately 2" in diameter.

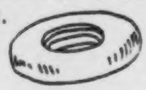


4. Cut into two 7½" pieces. Cut each down the center, leaving 1 inch intact at each end.

4.



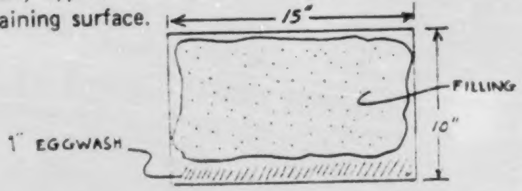
5. Spread to form oblong ring. Each ring will weigh about 11-15 ounces. Brush entire surface with eggwash.



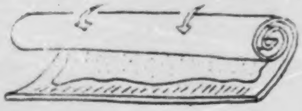
6. Place on a silicone paper-lined baking sheet or lightly greased pan. Proof in a proof-box at 80-85% relative humidity and 90°-95°F. for 25-35 minutes.
7. Bake at 375°F. for 22-25 minutes until golden brown.
8. Apply icing sparingly to high spots of cakes, leaving depressed areas bare. Do not ice over exposed filling.

Race Track Coffee Cake

1. Brush bottom 1-inch of sheet with eggwash.
2. Spread any type of oven-proof fruit or pie filling across the remaining surface.

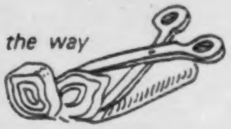


3. Roll the filled sheet toward you in a tight cylinder and press firmly to seal. Roll should be approximately 2" in diameter.

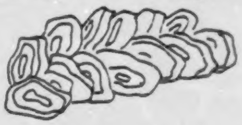


4. Make slits across the entire top with scissors, each about an inch apart. Cut slits only half-way through.

4. *Do not cut all the way through.*



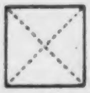
5. Lay out leaves in opposite directions. Brush entire surface with eggwash.



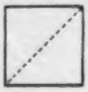
6. Place on a silicone paper-lined baking sheet or lightly greased baking pan. Proof in a proofbox at 80-85% relative humidity and 90°-95°F. for 25-35 minutes.
7. Bake at 375°F. for 22-25 minutes until golden brown.
8. Ice higher spots sparingly. Do not ice over exposed filling.

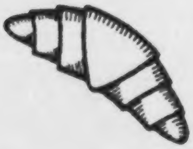
CROISSANTS

For tea-time-size cut into four pieces.

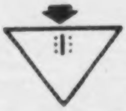


For dinner-size cut into two pieces.

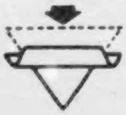




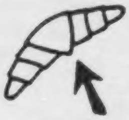
1. Make ¼" cut. Dock or prick with fork where shown.



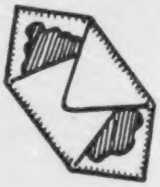
2. For make-up, wet entire surface with brush and water. Place cinnamon sugar over entire surface. Roll up and press point down firmly to seal.



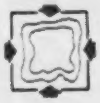
3. Brush rolled-up unit with water and dip in Nut Mixture. Shape into Croissant.



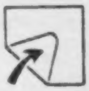
DIAMOND FRUIT FOLDS



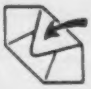
1. Place squares on bench side by side. Wet the entire surface with a brush and water.



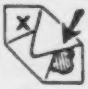
2. Fold up bottom left hand corner and press point down firmly.



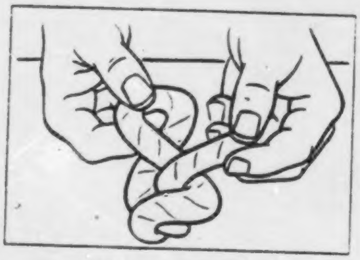
3. Fold down top right hand corner over the (in-place) bottom corner and press down—nearly pressing fingers thru the dough to the bench.



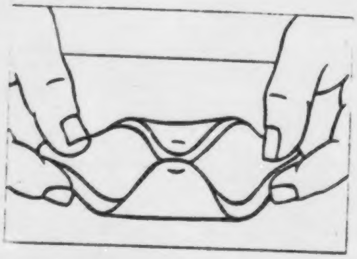
4. Place on a standard baking sheet lined with a Siliconized parchment paper and bake 25 minutes at 400° When cold, press down each end at the X's and fill with jams, cream fillings or pie fillings. Dust with powdered sugar or string with icing.



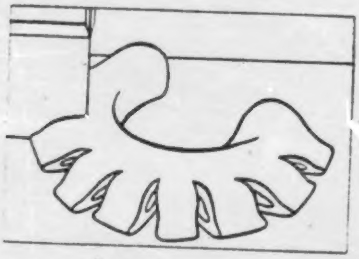
Assorted Shapes for Danish



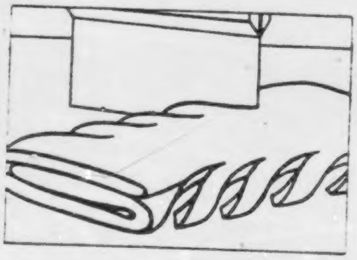
CHAIN TWIST



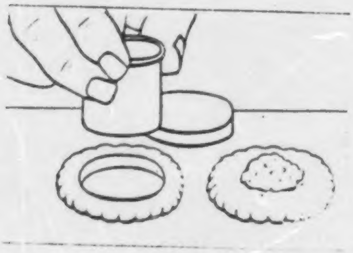
FRUIT-FILLED DANISH



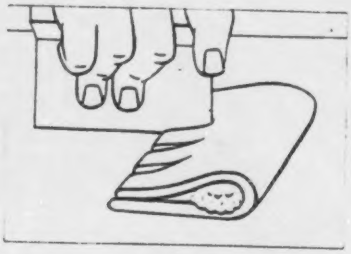
CHEESE RING



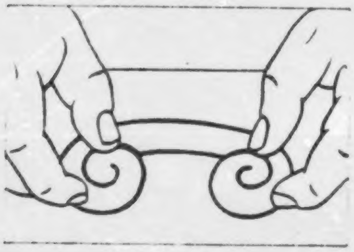
HERRING BONE



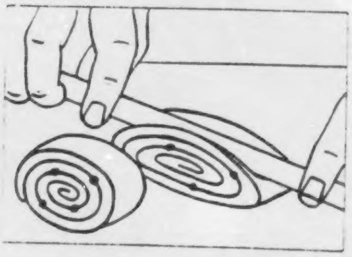
DANISH PATTY



BEAR CLAWS



DOUBLE ROLL



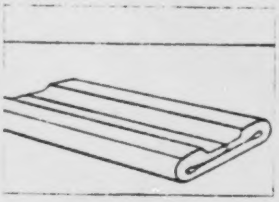
BUTTERFLY

Puff-Pastry Dough **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
5 1 – 2	– – 1 –	Patent flour Pastry flour Salt Puff paste	Step 1: Use a paddle. Mix to a medium size crumb (the size of a walnut).
3 –	8 1	Cold water Lemon flavor	Step 2: Add to the above and mix to a smooth dough.
4	–	Puff paste (Reserve for roll-in)	Step 3: The dough should be allowed to rest for 30 minutes before rolling-in process.
15	10	Total Weight	

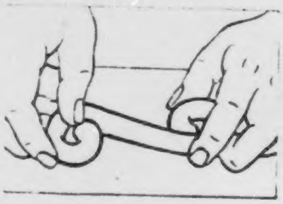
Puff-Pastry Dough Production

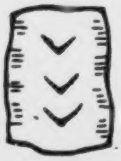
1. This dough needs a total of four roll-and-fold steps, using a 4-fold operation each time.
2. When rolling the dough, be sure to brush off excess flour before making the fold.
3. After the make-up of the various products, these products should be allowed to rest for at least 30 minutes before baking.
4. Bake the puff pastry at 400°F. to 410°F.
5. When cold, baked products may be iced with a thin water icing, or dusted with 6X sugar.



BUTTER HORN

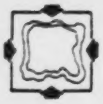
FIGURE 3 TWIST



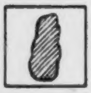


FRUIT STRUDEL

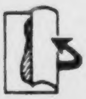
1. Place side by side on the bench and wet all edges with water and brush.



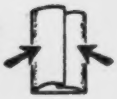
2. Place Strudel filling in oblong path down the center. Do not fill closer than ½ inch from each end.



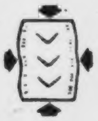
3. Fold in one side.



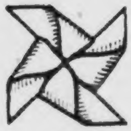
4. Fold over other side and turn Strudel over, placing the seam on the bottom. Press down firmly on all edges.



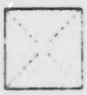
5. Wet the top with water, invert in a pan of coarse granulated sugar, and place sugared side up on a Siliconized lined baking sheet. Cut in the vents with a scissor. Bake at 400°F for 20-25 minutes.



PINWHEELS

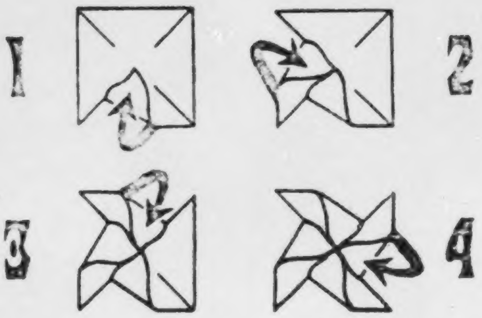


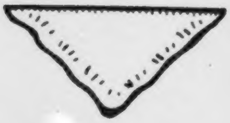
1. Place squares on the bench. Use a pastry wheel to make cuts (shown by dotted lines). Wet the entire surface with brush and water.



2. Fold one point at a time to the center as shown and press each down firmly. Place on a standard baking sheet and Siliconized parchment paper. Put a spoon of fruit pie filling in the center and bake at 400°F for 20-22 minutes.

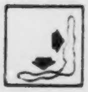
NOTE: *For added eye appeal: When cold, add another spoon of fruit pie filling, vanilla or butterscotch pie filling and top with string icing and powdered sugar.*



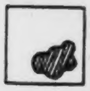


FRUIT & MEAT TURNOVERS

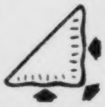
SUGGESTED VARIETIES: Apple, Cherry, Pineapple, Raisin, Mince Meat, Cranberry, Apricot, etc. Fruit Fillings should be of oven proof variety. (Should not reach boiling point before Turnover is fully baked.)



1. Place the desired number of squares on bench. Wet the right edge and bottom edge of each square, using a small brush and water.



2. Place filling off center of square and fold over as shown. Fold top left hand corner over filling to make turnover. Gently tap edges with fingers to form seal.

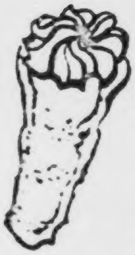


3. Place turnovers on a standard baking pan lined with Siliconized baking paper.

BAKE: *25 minutes at 400° Cool and ice or dust with powdered sugar.*

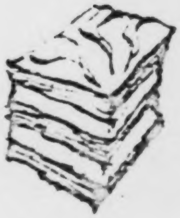
NOTE: *Some bakers prefer to bake the turnovers without filling. Cool them and then fill by hand, splitting open the joined sides and spooning in the filling. Donut filling pumps can also be used to apply filling after baking.*

CREAM HORNS



1. Cut strips 1 inch wide and 15 inches long. Makes 4- to 5-inch horn, depending on diameter of the cone used.
2. Brush strips with water to assure good seal. Wrap the lightly oiled cream horns cone with the wetted dough strips.
3. Horns may be rolled in sanding sugar if desired. Place on paper-lined bun pan and bake at 400°F for 10 to 12 minutes.
4. When cool, fill with cream and roll the exposed cream at the ends of the horn, lightly in ground nut meats.

NAPOLEONS



1. Use full 10" × 15" piece or smaller cut.
2. Dock sparingly. Place on paper-lined bun pans. Bake at 400°F for about 20 minutes.
3. When cool, slice into 1, 2, or 3 layers and fill with cream, custard, or jelly or a combination.

Cream-Cheese Pastry Dough

Lb.	Oz.	INGREDIENTS	METHOD
3	12	Cream cheese	Step 1: Use a paddle. Place all the ingredients in the mixing bowl and mix to a smooth dough.
1	4	Margarine	
1	4	High-ratio shortening	
	8	Granulated sugar	
–	¼	Vanilla	
–	¼	Lemon powder	
–	¼	Salt	
1	–	Whole eggs	
5	–	Cake flour	
12	12¾	Total Weight	

Cream Cheese Pastry Dough Production

1. Place on the bench; fold into a square piece of dough. Place on a clean, floured sheet pan, roll out to the full size of the sheet pan.
2. Retard overnight.
3. Roll dough out 1/8" thick.
4. Cut into 2" x 2" squares or triangles.
5. May be filled with apricot or raspberry jam, cinnamon-sugar and nuts, almond or cheese filling, etc.
6. Bake at 300°F. until crisp.

DEEE
LICIOUS

Short Dough

Lb.	Oz.	INGREDIENTS	METHOD
3	–	Granulated sugar	Step 1: Use a paddle. Mix until soft and smooth.
–	1	Salt	
–	2	Non-fat dry milk	
–	3	Corn syrup	
3	–	All-purpose shortening	
1	–	Whole eggs	Step 2: Add to the above in two stages. Mix well.
1	–	Water	Step 3: Add the vanilla to the water. Add to the above and mix in.
–	1	Vanilla	
6	–	Pastry flour	Step 4: Sift together. Add to the above and mix until the flour is absorbed into the mix. *Do not overmix.*
--	½	Baking powder	

14 7½ Total Weight

Short Dough Production

1. Retard the dough to keep it firm.
2. Remove the dough from the retarder about 30 minutes before use.
3. This dough is used mainly for lining bottoms and sides of cakes such as fruit-filled cakes and cheese-cake bottoms.
4. Roll the dough on sheet pans and bake at 400°F. until lightly browned.
5. Cakes should be turned out of the pans when still a little warm.

Babka Dough

Lb.	Oz.	INGREDIENTS	METHOD
2	–	Water (tempered)	Step 1: Use a paddle. Dissolve the yeast in the water. Add the flour and milk powder. Mix well. Let rise and start to recede. Leave in the bowl.
–	8	Yeast	
2	–	Patent flour	
–	4	Non-fat dry milk	
1	8	Granulated sugar	Step 2: Add these ingredients to the above sponge. Mix well.
–	1½	Salt	
–	½	Pumpkin spice mix	
–	2	Orange paste	
1	8	Whole eggs	
3	–	Patent flour	Step 3: Sift and add to the above. Mix until flour is absorbed.
1	–	Butter	Step 4: Melt together. Add to the above in a slow, steady stream. Mix well to a smooth dough.
1	–	Margarine	
13		Total Weight	

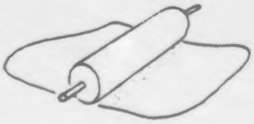
Babka Dough Production

1. The sponge step of this dough is necessary because of the richness of this dough. The sponge will also help in the structure of the finished product.
2. The dough should be allowed to rise only once when mixing has been completed.
3. Scale to the desired weights and shape into loaves. Place pieces on a lightly dusted sheet pan and retard; this will help the dough retain the melted fats.
4. Babkas are form cakes and are baked in round or loaf type pans which are paper lined.
5. 1-pound units of babkas are baked at 350°F. to 360°F. for about 45 minutes.

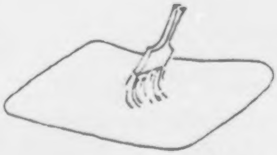
Special Fruit-Filled Stollen **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
12	8	Basic sweet dough	Step 1: Use a paddle. Mix all together for 2 minutes at second speed. *Do not overmix.*
—	4	Yeast	
—	8	Patent flour	
4	8	Prepared and flavored fruit mixture 	
17	12	Total Weight	

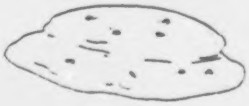
Special Fruit-Filled Stollen Production



1. Scale 1 lb. 2oz. pieces.
2. Round the pieces and place in a bread box.
3. Roll out as for parkerhouse rolls.
4. Wash with melted margarine and sprinkle with cinnamon-sugar. Fold over evenly and roll lightly (see pictures). Try to avoid rolling the front edges. They will look like lips.



5. Bake at 360°F. for 40 minutes.
6. When stollen is cool, dust with confectionery sugar.



Knish Dough

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
–	1	Salt	Step 1: Use a paddle. Mix together until smooth and stretchy. Note: Place the dough on a floured sheet pan, oil the top, and place in the retarder for 2 to 3 hours.
–	12	Whole eggs	
1	8	Vegetable or cottonseed oil	
1	4	Water	
2	12	High-gluten flour	
6	5	Total Weight	

Roll out the dough as thin as possible.

Cut 4" x 16" strips.

Place 3 to 4 oz. of knish filling at the top edge of each strip. Roll down, brush bottom edge with water and seal.

Press the ends to seal them, and place on paper-lined sheet pans.

Bake at 375°F. to 400°F.

Knishes can be deep-fat fried at 370°F.

Knish Filling

Lb.	Oz.	INGREDIENTS	METHOD
6	4	Cooked mashed potatoes	Step 1: Use a paddle. Mix together so all ingredients are evenly distributed.
–	10	Finely chopped sauted onions	
–	3½	Chicken fat	
–	½	Salt	
To	Taste	Pepper	
7	2	Total Weight	

Note: Knishes may be made in strips as above, or individually. For individual pieces, cut rolled-out dough into square or oval shapes. Place a generous amount of filling in the center. Wash edges with water or egg wash. Fold over to form a turnover, seal, and bake or fry.

Chrusciki (kroosh-CHICK-ee) **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
–	8	Granulated sugar	Step 1: Use a dough hook.
–	½	Salt	
–	½	Baking powder	Blend the dry ingredients together.
7	–	High-gluten flour	
1	–	Cottage cheese	Step 2:
–	8	Margarine	Add to the above and mix until the dough is firm and smooth.
3	–	Egg yolks	
1	–	Buttermilk	
–	2	Rum flavor	
13	3	Total Weight	

Chrusciki Production

1. Scale into oblong 2 lb. 8 oz. pieces.

2. Roll out each piece to 1½ feet wide by 7 feet long.

3. Using a multi-wheel pastry cutter, cut dough strip into 2" x 4" rectangles.

4. Twist pieces once or twice, place twisted pieces on frying screen and fry submerged for 30 seconds at 350°F.

5. May be sold plain or dusted with confectionery sugar.

Note: This product is sold by the pound, like cookies.

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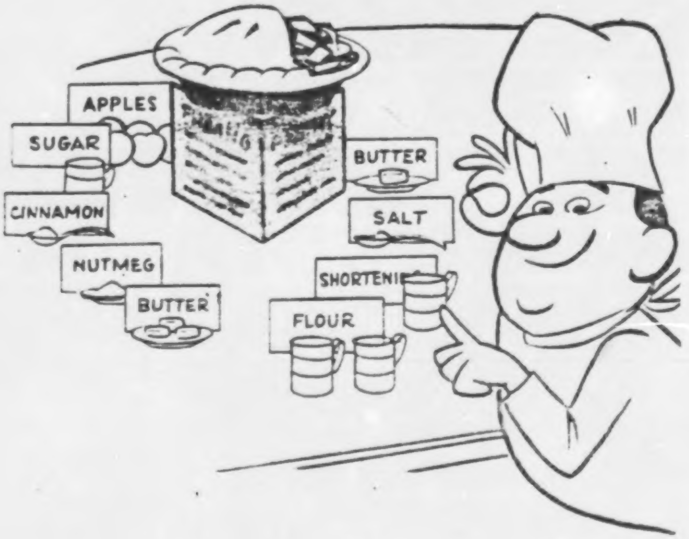
SECTION IV – PIES


APPLES
SUGAR
BUTTER
CINNAMON
SALT
NUTMEG
SHORTENI
BUTTER
FLOUR

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Pie Making — Ingredients

Pie dough, made with hard-wheat flour or a blend of hard- and soft-wheat flours, should be allowed to rest in the retarder for 8 to 10 hours before use. This rest period mellows the gluten, which will increase the shortness and tenderness of the pie crust.

A quality vegetable shortening should be used, as shortening is the heart of the pie dough. Salt of fine granulation should also be used, because of its ability to dissolve easily, and for its equal distribution throughout the pie dough. When milk is used it may be either fresh, liquid skim, or non-fat dry milk solids. The best types of sweetening to use are sugar in liquid form and corn syrup. These will caramelize more quickly than sugars that have to melt first during the baking process.

Remember: The pie dough that you make can be no better than the ingredients selected to make it.

Dough Mixing

To maintain quality of pie doughs, the correct temperature of the ingredients is a major factor.

It is best to use ice-cold liquids when making pie dough. This keeps the shortening firm. The dough should be stored in a cool place, such as a retarder. If the pie dough is warm when mixed, or stored in a warm place, the shortening will "oil out" or separate from the dough, and this entirely changes the characteristics of the crust.

After mixing the pie dough, you can prevent the exposed surface from drying out and becoming crusty by placing a clean, damp cloth over it.

With so many different types of pie doughs, it would be impossible to list every pie-dough formula. Every baker has a favorite formula and a particular mixing method; with time, you too will have your favorite formula.

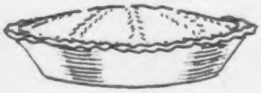
#1 Pie Crust (Flaky Type) **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
10 7	— 8	Pastry flour All-purpose shortening	Step 1: Use a paddle. Mix together carefully. There should be numerous small lumps of shortening throughout the mix.
— 3	5¾ 8	Salt Cold water 	Step 2: Dissolve the salt in the water, add to the above, and mix lightly.

21 5¾ Total Weight

Pie Crust Production

1. To be used for fruited-filled pies.
2. This type of pie dough should be mixed carefully after the water has been added. Considerable flour that has not been coated with shortening will be present.
3. Overmixing after the water has been added to the dough will cause toughness of the dough.
4. This type of dough should be retarded for several hours before make-up.



#2 Pie Crust (Medium-Flaky Type) **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
10 7	– 8	Pastry flour All-purpose shortening	Step 1: Use a paddle. Mix together well, so that all the flour is coated with shortening. *Do not mix to a paste.*
– 3	5¾ –	Salt Cold water 	Step 2: Dissolve the salt in the water, add to the above, and mix thoroughly. Place on a lightly dusted sheet pan and place in the retarder.
20	13¾	Total Weight	

Pie Crust Production

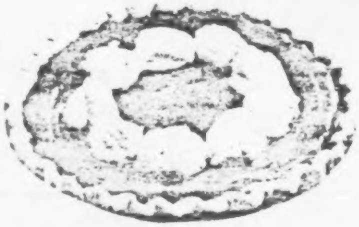
1. To be used for fruited-filled pies.
2. This type of pie dough should be mixed carefully after the water has been added. Considerable flour that has not been coated with shortening will be present.
3. Overmixing after the water has been added to the dough will cause toughness of the dough.
4. This type of dough should be retarded for several hours before make-up.

#3 – Soft Pie Crust (For Shells) Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
10 5	– –	Pastry flour All-purpose shortening	Step 1: Use a paddle. Mix together almost to a paste.
2 – – –	12 5 5 5	Cold water Salt Non-fat dry milk Liquid sugar (or corn syrup)	Step 2: Dissolve the three ingredients in the water. Add to the above and mix thoroughly.
18	11	Total Weight	

Soft Pie Crust Production (For shells)

1. This dough when made, is ready for make-up immediately.
2. Due to the low moisture content, this dough should be used up daily, as it will get too dry if stored overnight.
3. Use very little dusting flour during makeup, as an excess amount will dry and toughen the dough.
4. For best results, the pie shells should stand for several hours before being baked. This will evaporate some of the moisture and will prevent considerable oven shrinkage. The crust will hold a better crimped edge.



Fruit-Filled Pies
Tools

The following will be necessary for you to use:

1. A clean cloth
2. A small, hand-type rolling pin
3. A baker's scraper
4. Pie plates
5. Dusting flour
6. Egg wash
7. A wash brush
8. Four-pound weight

Fruit-Filled Pie Make-up

1. Place a pie plate upside down on the cloth, and draw a circle completely around the outer edge. Then remove the pie plate.
2. Roll out the pie-dough bottom approximately ¼ inch larger than the circle. Fold the pie dough in half.
3. Place the folded dough in the bottom of the pie plate, making sure it is well seated in the plate. There should remain a slight overhand.
4. Egg-wash the outer edge of the dough, making sure the egg wash *does not run* down on the sloping sides of the dough.
5. Fill the pie with prepared fruit filling. *Do not over-fill.*

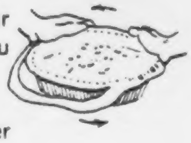
(Cont. on next page)

6. Roll out a piece of pie dough for the top as you did for the bottom. Fold in half, and on the folded edge, cut three straight lines in the center of the folded dough with your scraper.

7. Place the top pie dough on half the pie, unfold over the rest of the pie.

8. With the palms of both hands gently press around the top edge of the pie to seal the top to the bottom.

9. Place the pie on the four-pound weight. Use the center crease of your palms to cut away the overhanging dough, rotating the pie as you gently squeeze. This action will seal and trim the pie.



10. The top of the pie can be washed with egg wash or milk, whichever you choose. *Make sure you do not wash the openings on the top, as the wash will re-seal the openings.*

Baking The Pie

In baking pies, the oven should be pre-heated to 450°F. A hot oven is necessary to color the crust of the pie and to prevent *boil-out* of the fruit filling. A cooler oven temperature will prevent the pie crust from coloring and also cause boil-out.

Pie Defects

When the pie bottom is raw or wet, this means that the pie bottom was rolled too thin, the oven was too cool, or the pie filling was warm or hot when you filled your pies.

When your pies blister, this means that there were not enough holes in the pie tops, or the holes were sealed, or you used too much egg wash.

When pie fillings run out, this means that the pies were improperly sealed, you used too much filling, or your oven was too cool.

When your pie crust shrinks, this means that your oven was too cool, the crust was too tough, or there was too much rolling and handling of the dough.

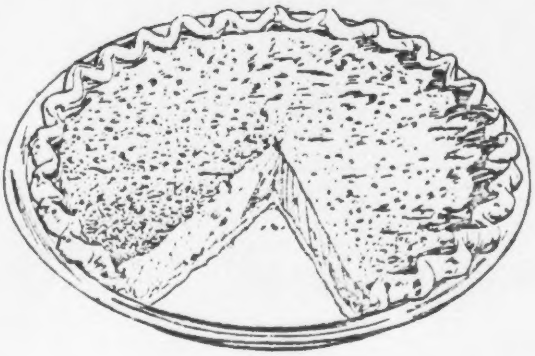
Pumpkin Pie **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
2	–	Granulated sugar	Step 1: Use a paddle. Sift together and mix well.
–	8	Brown sugar	
–	6	Pastry flour	
–	½	Cinnamon	
–	¼	Ginger	
–	1	Salt	
6	4	Pumpkin	Step 2: Add to the above and mix in very well.
1	–	Corn syrup	Step 3: Add to the above and mix in thoroughly. Remove bowl from machine.
6	4	Fresh liquid milk	Step 4: Add to the above gradually. Mix with hand wire whip until mix is smooth. Let stand for 1 hour.
1	–	Whole eggs	Step 5: Add the eggs and mix in well with the wire hand whip.
–	8	Egg whites	

17 15¾ Total Weight

Pumpkin Pie Production

1. Scale 2 lb. 8 oz. of filling per 9" pie.
2. Bake at 450°F.
3. Winter squash may be used exactly as pumpkin is used. The name of the pie becomes Squash Pie.



Coconut Custard Pie **Basic Mix**

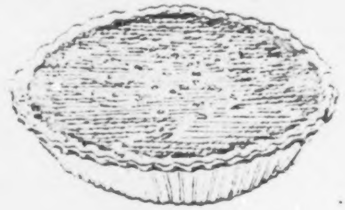
Lb.	Oz.	INGREDIENTS	METHOD
1	4	Sugar	Step 1: Use a paddle. Blend the dry ingredients together.
–	¼	Salt	
–	8	Milk powder	
–	2	Corn starch	
1	4	Whole eggs	Step 2: Whip the eggs well. Mix into above.
4	–	Water	Step 3: Add the vanilla to the water and stir in well.
–	1	Vanilla	
–	3	Melted butter (optional)	Step 4: Stir in.

7 6¼ Total Weight

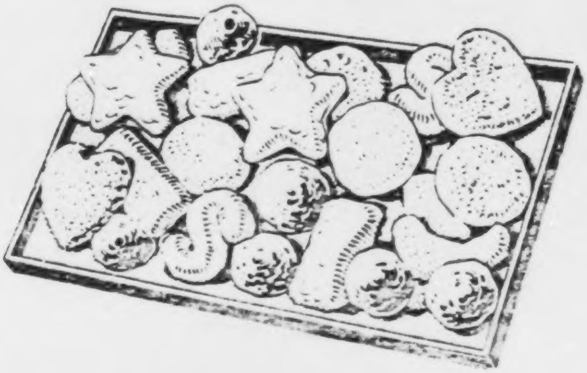
Coconut Custard Pie Production

NOTE: *Allow custard to stand 30 minutes before filling pies.*

1. Be sure to mix the custard filling well before filling the pie shells. This enables you to mix any ingredients which have settled to the bottom. Avoid whipping too much air into the custard. This is the cause of blisters and uneven crust color in baking.
2. Fill the shells half-full and place in the oven. Bake 5 minutes before filling them to just below the brim. This will insure a better bake and will eliminate curdling or separation.
3. Custard pies should be baked at 425°F. Pies are considered baked if they feel slightly jelled or firm in the center. Touch them gently in the center to test the consistency of the custard.
4. For coconut custard pies, sprinkle the bottom of the unbaked pie shell with unsweetened shredded coconut.



SECTION V – COOKIES



Cookie Ingredients and Their Functions

Ingredients	Description	Functions
Flour and Pastry flour	Soft-type flour should be used in making cookies. This will help keep the dough tender when working with it.	Structure-forming material which supports the other ingredients
Leavening agents		
Baking powder	Baking powder is the most commonly used leavening in cookies.	Produces volume and fluffiness.
Baking soda	Baking soda is used alone or in combination with an acid (such as sour- or buttermilk, as well as molasses).	Gives more spread (especially soda). Gives tenderness.
Ammonia	Ammonia is also used as a leavening agent in some cookies.	

Cookies

Ingredients	Description	Functions
Egg whites	Neutral in flavor.	Used as a drying agent and baking toughener.
All-purpose shortening	Blends well with other ingredients and creams easily. Will not bake out of cookies. Gives uniform product results. Neutral in flavor.	Gives color and tenderness. Improves keeping quality. Develops good grain and texture. Adds richness.
Milks Liquid whole Liquid skim Reconstituted dry Sour milk Buttermilk Milk solids	Milk in all forms may be used in cookies. When sour milk and buttermilk are used, baking soda is used as the leavening agent.	Add nutrients. Add color. Sour- and buttermilk add flavor. Add liquid to mix. Are drying agents in finished product.

(Cont. on next page)

Cookies (cont.)

Ingredients	Description	Functions
Sugars Granulated Confectionery Brown	Used for low moisture and more spread. Used when less spread is desired. Gives added flavor.	Add flavor and taste. Tenderize. Give smoother texture and grain. Retard spread of cookie in pan.
Sugar syrups Malt Molasses Honey Glucose Invert	Use in amounts of approximately 10% of the weight of the other sweeteners in the cookie formula. Increases amount of liquid in dough.	Increased liquid improves keeping quality of cookies.
Salt	Use only fine table salt for equal distribution throughout the dough.	Brings out flavor of all other ingredients.

Cookie Baking Tips

Most cookies are baked at temperatures of 375° to 400°F. Cookies should be baked under a constant, steady heat. It is good practice to under-bake cookies slightly, as there is sufficient heat in the pan to complete the baking process after the cookies are removed from the oven.

Cookies may bake unevenly if the pans are battered or out of shape. The cookies, baked in these pans, will bake unevenly. Therefore, be sure your baking pans are uniform.

Over-baking will dry out the cookies, and should be avoided. Cookies should be baked for *no longer than 8 to 10 minutes.* Cookies that are over-baked will lose their flavor, taste, and texture.

REMEMBER, FOR GOOD COOKIE BAKING, DO NOT EXCEED 8 TO 10 MINUTES.

Basic Mix

Spritz Cookies (Bag-Out Type)

Lb.	Oz.	INGREDIENTS	METHOD
2 5 –	– – 1	Granulated sugar All-purpose shortening Salt	Step 1: Use a paddle. Mix these ingredients well.
1	–	Egg whites	Step 2: Add to the above in a slow stream and mix in well.
–	1	Flavor (vanilla, almond, orange, etc.)	Step 3: Add to the above and continue mixing.
5	–	Patent flour	Step 4: Sift the flour. Fold into the above by hand. *Do not overmix.* Bake at 375°F.
13	2	Total Weight	

Basic Mix

Pumpkin Cookies (Bag-out Type)

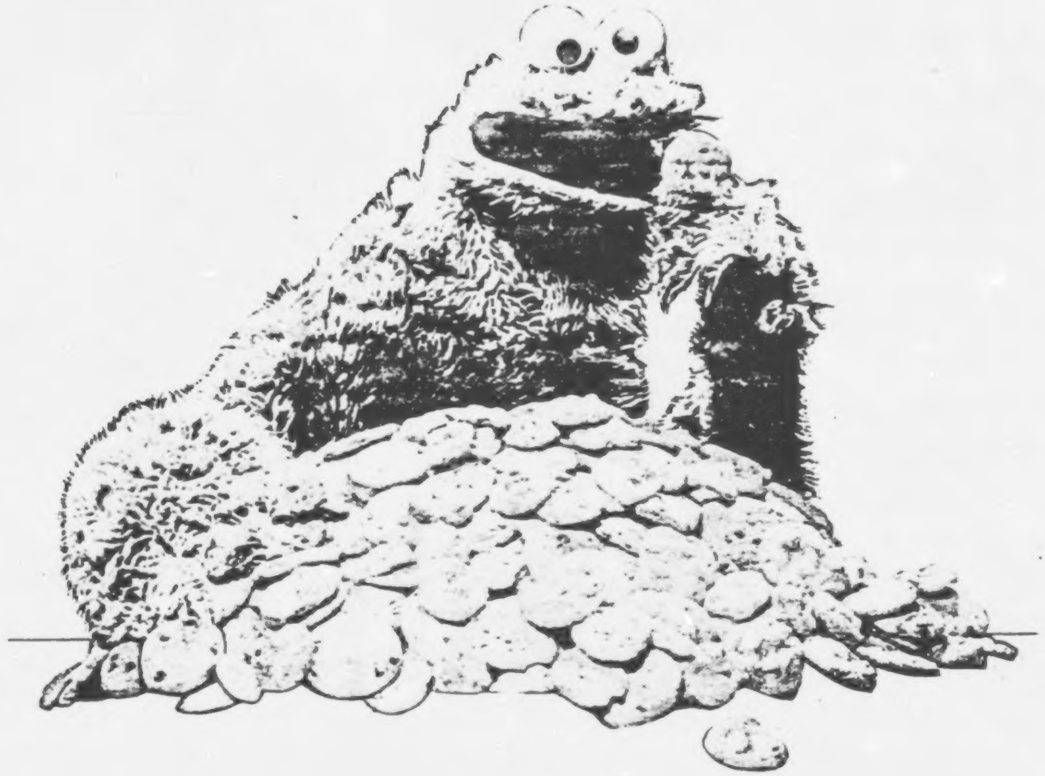
Lb.	Oz.	INGREDIENTS	METHOD
5 3 1 7	12 2 2 –	Granulated sugar High-ratio shortening Whole eggs Pumpkin	Step 1: Use a paddle. Mix 3 minutes at second speed.
5 – – –	12 1¾ 1 ½	Pastry flour Baking powder Salt Pumpkin spice	Step 2: Add to the above and mix 3 minutes at second speed. *Note:* Bag out with medium star tube. Bake 375°F.
22	15¼	Total Weight	

Vanilla Cookies (Bag-out Type) Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
5	–	Pastry flour	Step 1: Use a paddle. Place all the ingredients in the mixing bowl. Mix to a smooth dough. Use second speed on the mixer. Note: Bag out on a paper-lined sheet pan. Bake at between 375°F. to 400°F.
4	8	Granulated sugar	
3	–	All-purpose shortening	
–	2	Salt	
–	¾	Baking soda	
–	12	Whole eggs	
2	–	Liquid milk	
–	1	Vanilla flavor	
15	7¾	Total Weight	

French Macaroons (Bag-out Type) Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
4	–	Almond or macaroon paste	Step 1: Use a paddle. Place all these ingredients in the bowl. Mix until soft and no lumps are seen.
–	¼	Salt	
2	–	Granulated sugar	
1	–	Confectionery sugar	
1	6	Egg whites	Step 2: Add to the above ¼ of the egg whites; mix until smooth. Add the balance of the egg whites in three stages, mixing well after each addition.
			Note: Wet the pastry bag with cold water and wring out. This will make for easier bagging out. Garnish with pieces of cherry or nuts. Let the cookies stand for several hours before baking. Bake at 375°F. to 380°F.
8	6¼	Total Weight	



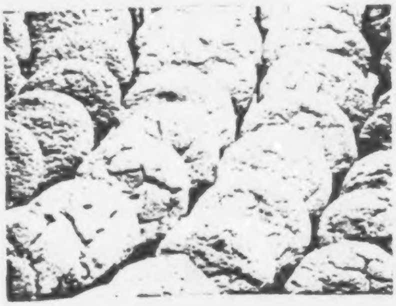
Chocolate Chip Cookies (Bag-Out Type)

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
1	8	Brown sugar	Step 1: Use a paddle. Mix all these ingredients at the same time. Mix at second speed until smooth.
1	4	All-purpose shortening	
–	6	Margarine	
2	4	Cake flour	
–	½	Baking soda	
–	1/8	Salt	
–	6	Whole eggs	
–	½	Vanilla	
1	–	Chocolate chips	Step 2: Add to the above and mix only until incorporated into the mix. Bake at 375°F.
–	4	Ground nuts	

7 1 1/8 Total Weight

Sugar Cookies (Cut-Out Type) Basic Mix 163

Lb.	Oz.	INGREDIENTS	METHOD
4	–	Granulated sugar	Step 1: Use a paddle. Place all the ingredients in the mixing bowl. Mix at second speed until dough is smooth. Mixing time should be only about 2 minutes. Note: Roll out a small piece of the dough on a cloth to about 1/8 of an inch. Cut out with 2" cookie cutter. Place on paper-lined pan. Bake at 385°F. Cookies may be garnished before baking.
3	–	All-purpose shortening	
–	1½	Salt	
–	½	Vanilla flavor	
5	8	Cake flour	
–	3	Baking powder	
1	–	Whole eggs	
–	2	Non-fat dry milk	
–	14	Water	
			

14 13 Total Weight

Peanut Butter Cookies (Cut-Out Type) Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
6	–	Peanut butter	Step 1: Use a paddle. Mix at low speed for 5 minutes.
4	–	All-purpose shortening	
2	4	Whole eggs	Step 2: Add to the above and mix for 4 minutes at low speed.
1	–	Liquid milk	
4	–	Granulated sugar	Step 3: Add to the above and mix for 3 minutes at low speed.
3	–	Brown sugar	
7	8	Pastry flour	Step 4: Sift together. Add to the above. Mix until smooth, using low speed. Note: Cut out as for sugar cookies. Bake at 390°F.
–	2	Baking soda	
–	2	Salt	
–	2	Baking powder	

28 2 Total Weight

164

165

Shortbread Cookies (Cut-Out Type) Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
2 – 2 2 –	– 1 – – 6	Granulated sugar Salt All-purpose shortening Margarine Corn syrup	Step 1: Use a paddle. Blend these ingredients together until fluffy and light.
1 –	– 1½	Whole eggs Vanilla flavor	Step 2: Add the eggs in two stages, adding the vanilla with the second stage.
3 3	– –	Cake flour Patent flour	Step 3: Sift together. Fold in lightly until all the flour is absorbed into the mix.
13	8½	Total Weight	

Shortbread Cookie Production

1. These cookies are of the sugar-cookie type; they can be made in a variety of shapes.
2. The cookies can be chocolate-dipped, jam-filled, fudge-nut-topped, etc.
3. Bake at 390°F. until golden brown.
4. Garnish *after the cookies are cool.*

166

Chinese Cookies (Ice-Box Type) **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
7	–	Granulated sugar	Step 1: Use a paddle. Place all the ingredients in the mixing bowl. Mix at second speed until the dough is smooth.
7	–	All-purpose shortening	
–	1¼	Baking soda	
–	2	Salt	
1	–	Whole eggs	
0	–	Patent flour	
–	¾	Almond flavor	
–	½	Vanilla flavor	

25 4½ Total Weight

Chinese Cookie Production

1. Scale the dough into 2-pound pieces and roll into a long round log.
2. Retard overnight.
3. Remove from retarder and roll in sliced almonds, letting the dough log pick up only as much of the nuts as the dough will hold.
4. Cut into even slices.
5. Bake at 380°F.

Note: For marble effect, remove the dough from the bowl. Place the dough on a clean bench, flatten the dough. Spread 1 lb. of sweet chocolate on the flattened dough, roll up, and scale.

169

Mondel Bread (Toasted sponge) Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
3	—	Granulated sugar	Step 1: Use a paddle. Mix these ingredients to a smooth paste. Use slow speed.
—	1	Salt	
1	—	Almond or macaroon paste	
—	8	Whole eggs	
3	8	Whole eggs	Step 2: Change to a whip. Add to the above and whip until thick, as for sponge cake.
—	1	Vanilla flavor	
—	½	Almond flavor	
3	8	Patent flour	Step 3: Sift and fold in by hand.
2	—	Filberts or walnuts	Step 4: Add to the above and fold in by hand.
1	—	Glazed cherries or diced fruit	

14 10½ Total Weight

Mondel Bread Production

1. Use a clean pastry bag to bag out the mix onto a paper-lined sheet pan. The hole at the bottom should be at least 1 inch. This will allow the nuts and cherries to pass through.
2. Bake as soon as the mix is bagged out. These strips will spread after bagging.
3. Bake at 400°F.
4. When the strips are cool, remove them from the pans. Cut the strips into ½-inch cuts; the cuts should be even in size.
5. Lay the cuts flat and toast in an oven of 350° F. *Do not over-bake.*

170

Gingerbread Dough (Men, Houses, etc.) **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
3 3 3 – –	– – – 3 ½	Brown sugar Granulated sugar Margarine Pumpkin spice mix Baking soda	Step 1: Use a paddle. Mix together at second speed.
1	–	Whole eggs	Step 2: Add to the above and mix in thoroughly.
1	–	Water	Step 3: Add to the above in a slow, steady stream.
10 –	– 2½	Pastry flour Baking powder	Step 4: Sift together and add to the above. Mix until smooth.
21	6	Total Weight	

Gingerbread Products Production

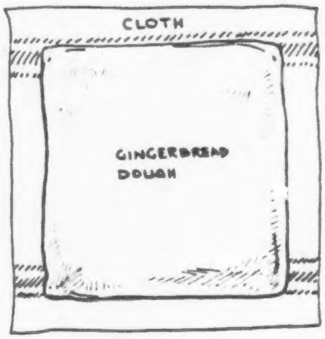
These cookies are the large cut-out cookies that are popular in most bakeshops. The quality and appearance of the cookies are very important, and a moderately priced cookie is often an excellent sales leader and always attracts the youngsters. Of greatest importance in the production of these cookies is preparation of the dough and the method of makeup.

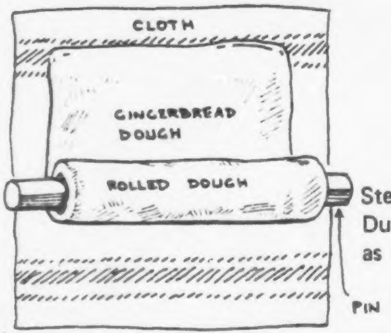
1. Use a clean cloth to roll out the dough.
2. Cut out the various shapes, just like the sugar cookies.
3. Cookies may be washed with an egg-white solution before baking. This will add gloss to the surface.
4. For gingerbread houses, scale the dough at 3 lb. 8 oz.
5. Bake at between 325°F. and 350°F., depending on what size product you are baking.

(Continued on next page.)

How to Roll Out Gingerbread Dough for Gingerbread Houses

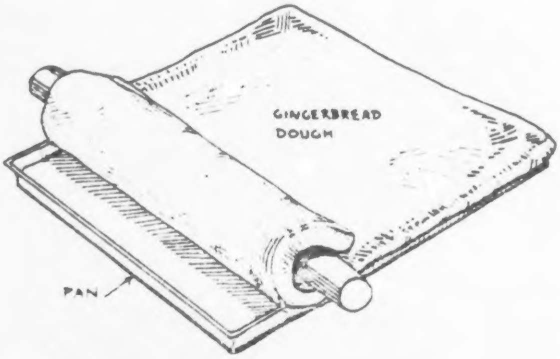
Step #1
Scale off 3½ pounds of gingerbread dough. Roll out on cloth to a size a little larger than the pan on which it is to be baked.


CLOTH
GINGERBREAD DOUGH


CLOTH
GINGERBREAD DOUGH
ROLLED DOUGH
PIN

Step #2
Dust with flour to prevent sticking and then, using the rolling pin as a core, roll the entire piece of dough onto it.

Step #3
Now unroll the dough onto the pan. Trim overhang.


GINGERBREAD DOUGH
PAN

Dock complete sheet of dough.
Outline parts of house as needed.

Brown Brittle (Bars)

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
4	–	6X Confectionery sugar	Step 1: Use a paddle. Mix these ingredients for 3 minutes at second speed.
1	–	Margarine	
1	–	All-purpose shortening	
1	–	Fudge base	
–	½	Salt	
–	½	Vanilla	
1	10	Whole eggs	Step 2: Add to the above gradually while the machine is running.
1	12	Cake flour	Step 3: Add to the above and mix until smooth.
			NOTE: Divide into three equal parts and spread out on three sheet pans. Sprinkle 10 ozs. of pecan pieces on top of each pan. Cut into 1" squares while warm. Bake at 375°F.
10	7	Total Weight	

SECTION VI – ICINGS

Icing Hints

1. Shortening should be at 70° to 75°F.
2. Butter should be of a high score and at same temperature.
3. Confectionery sugar should always be *sifted.*
4. Butter-cream type icings should be kept in a cool place.
5. Icings should be consumed (used up) daily, as they spoil easily, especially in warm weather.
6. Icings with a high percentage of shortening or butter should be creamed at a low speed. A high creaming speed will cause the product to become porous.
7. All equipment should be thoroughly cleaned after use.

Note: Eye appeal is the public's first judgment in selecting a decorated cake, but you may lose the customer the next time because of poor-quality ingredients. Take care to produce the best the first time and every time.

Butter-Cream Icing

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
5	—	High-ratio shortening	Step 1: Use a paddle. Mix until smooth. Scrape down paddle and bowl. Use low speed.
—	2	Salt	
21	—	6X Confectionery sugar (sifted)	
—	2	Vanilla flavor	Step 2: Add the flavors to the water. Add half the liquid to the above and mix smooth. Scrape down and add the balance of the liquid. Mix at second speed for 15 minutes.
—	1	Butter flavor	
3	8	Water	
			Note: This icing is suitable for all layer cakes, cupcakes, and sheet cakes. Store in a cool place.
29	13	Total Weight	

179

Pastry Icing **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
2 1	– –	Granulated sugar Water	Step 1: Dissolve the sugar in the water and bring to a boil.
4 – – – – –	8 12 2 ½ ¼ ¼	6X Confectionery sugar (sifted) Corn syrup Margarine Vanilla flavor Salt Cream of tartar	Step 2: Use a paddle. Start to mix at slow speed. Gradually add the above in a slow stream. Mix until smooth.
			Note: The icing can be thinned out if too thick, by adding a little simple syrup.
8	7	Total Weight	

Chocolate Fudge Icing **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
1 –	14 8	High-ratio shortening Margarine 	Step 1: Melt together.
– 1	1 8	Salt Cocoa	Step 2: Use a paddle. Mix together and add the above to this.
10	–	6X Confectionery sugar (sifted)	Step 3: Add to the above and mix until smooth.
– 1	8 12	Invert sugar or honey Hot water	Step4: Dissolve the invert or honey into the hot water. Add to the above slowly to avoid lumping.
16	3	Total Weight	

180

181

Royal Icing

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
–	5	Meringue-powder	Use a paddle.
8	–	6X Confectionery sugar (sifted)	Place all the ingredients in the mixing bowl.
1	8	Water	Mix at second speed until smooth and creamy.
–	1	Cream of tartar	
		Note: 1. This is a hard-drying icing and must be kept covered. 2. Royal icing must be re-beaten as many times as desired. 3. Royal icing is very good for building gingerbread houses and for all baked products which need a hard icing.	

9 14 Total Weight

Basic Mix

Glossy Chocolate Icing

Lb.	Oz.	INGREDIENTS	METHOD
15 – –	– ¾ 14	Fondant Salt Cottonseed oil	Step 1: Use a paddle. Mix together until smooth.
4 –	– 12	Bitter chocolate Cottonseed oil	Step 2: Melt together. Add to the above and mix smooth.
1	8	Hot water	Step 3: Add to the above and mix smooth.

182

22 2¾ Total Weight

183

Rose Paste Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
6 2	– –	6X Confectionery sugar (sifted) High-ratio shortening	Step 1: Use a paddle. Mix together at second speed.
–	8	Egg whites	Step 2: Add to the above gradually in a slow stream while machine is running in second speed.
			Note: This formula is excellent for making roses and other flowers. Must be kept in closed container.

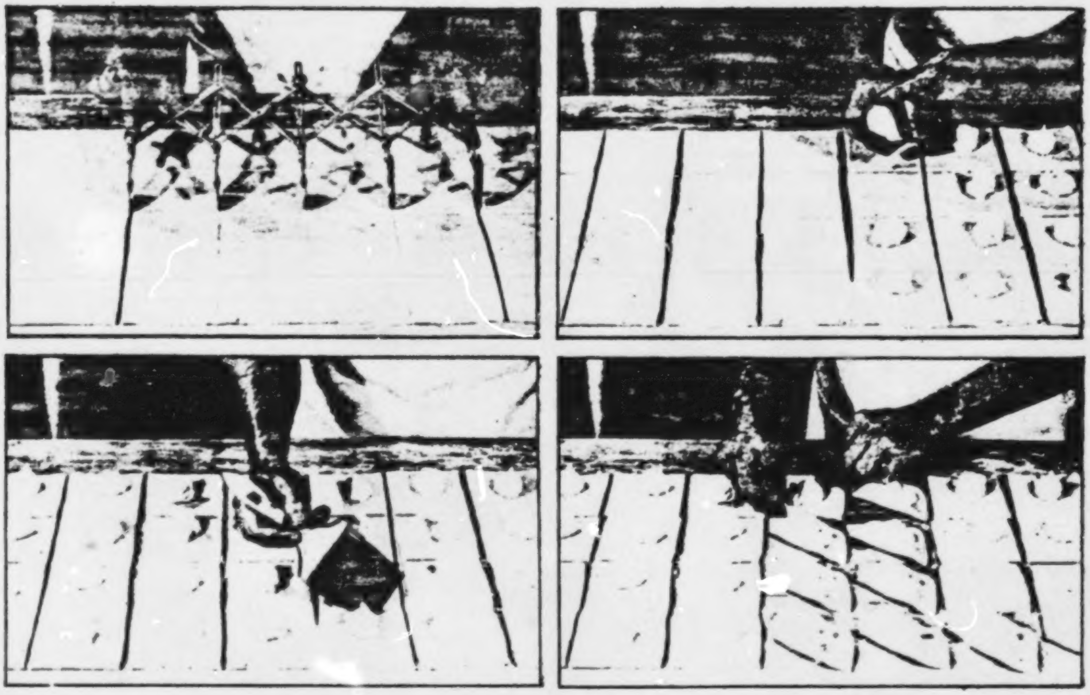
8 8 Total Weight

Wash Syrup (For Pastries) Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
5 – 4	– 8 –	Granulated sugar Corn syrup Water	Step 1: Use hand wire whip. Bring the water to a boil. Gradually add the corn syrup and sugar. Keep the whip moving until removal from stove.
1	–	Apricot coating 	Step 2: The apricot coating may be added to the above for extra flavor and a thicker syrup. The color will become amber.

10 8 Total Weight

184



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SECTION VII – FILLINGS

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Fillings

Fillings That Spread

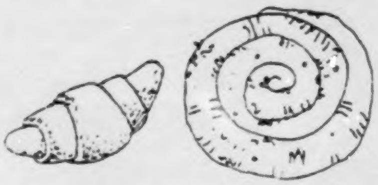
When using heavy fillings such as almond, they should be spread in even, thin layers. Large, uneven globs of the heavy-type fillings will cause a loss of volume in dough products. They may also cause large lumps to form in the larger round or loaf-type products. Too heavy a filling may cause the product to collapse while proofing.

Fillings That Sprinkle

The sprinkle type of filling, such as streussel, cinnamon-sugar and fruits, should be applied to the tops of dough products *only after* they have been given at least three-quarters' proof time. If applied at the time of make-up, the sugar-type products would melt, making a sticky syrup and causing the crust to burn. When fruit is applied at the time of make-up, the product will look very sloppy, and the various colors will smear.

Note: When you are making dough products for the retarder or freezer, it is best not to put anything on the tops. Wait until you are ready to use them and then follow the above procedures.

Cinnamon–Sugar Filling **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
3	–	Granulated sugar	Step 1: Blend the two ingredients together thoroughly by hand.
–	1	Cinnamon (good grade)	
			Note: Avoid using extra cinnamon. It will darken the mix and the taste will be too strong.
3	1	Total Weight	

Deluxe Streussel Filling (For Sprinkling) **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
–	1¼	Salt	Step 1: Use a paddle. Place all the ingredients in the bowl. Mix until all are well blended. Note: This mix will be a little on the dry side. That is what we want, so that it can be sprinkled on cake and pastry tops.
3	–	Granulated sugar	
3	12	Margarine	
–	8	Molasses	
–	½	Butter flavor	
–	2½	Cinnamon	
2	8	Ground filberts or paste	
6	4	Pastry flour	

16 4½ Total Weight

Peanut Butter Filling **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
2	8	6X Confectionery sugar	Step 1: Use a paddle. Blend together to a spreading consistency.
–	1	Salt	
–	4	Patent flour	
1	–	Margarine	
1	8	Peanut butter	

5 5 Total Weight

Cheese Filling Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
5 1 – – – – – –	– 8 10 1 5 10 ½ 1	Baker's cheese Granulated sugar Non-fat dry milk Powdered lemon juice Patent flour All-purpose shortening Salt Vanilla flavor	Step 1: Use a paddle. Place all these ingredients in the mixing bowl. Mix to a smooth paste.
–	6	Whole eggs	Step 2: Add to the above gradually and mix smooth.
			Variations: To 1 lb. of cheese filling add 1 oz. white raisins or 2 oz. of chopped cherries or pineapple.

8 9½ Total Weight

Almond-Paste Filling Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
1 1	– –	Almond paste Granulated sugar	Step 1: Use a paddle. Blend together to form a smooth paste.
–	4	Egg whites	Step 2: Mix into the above paste.
2 – – –	– 1 12 ½	Cake crumbs Non-fat dry milk Water Salt	Step 3: Add to the above and mix in thoroughly.

5 1½ Total Weight

Danish and Babka Filling

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
2	8	Almond or kernel paste	Step 1: Use a paddle. Mix until all lumps are broken up.
2 2 2 –	8 8 8 6	All-purpose shortening Cake crumbs Confectionery sugar Patent flour	Step 2: Add all the ingredients to the paste. Blend to a light consistency.
– –	½ ½	Cinnamon Vanilla	Step 3: Add to the above and mix until well blended.
1	10	Water	Step 4: Add to the above. Mix to a spreadable consistency.
12	1	Total Weight	

Rugelach Filling

Basic Mix

Lb.	Oz.	INGREDIENTS	METHOD
1 3 3 3 –	8 8 – 12 ¼	Brown sugar Apple sauce Ground filberts Cake crumbs Salt	Step 1: Use a paddle. Place all the ingredients in the bowl. Mix until very smooth and spreadable.
11	12¼	Total Weight	

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Cream Filling **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
2 – –	– 6 6	6X Confectionery sugar Margarine All-purpose shortening	Step 1: Use a paddle. Blend together thoroughly.
–	8	Whole eggs	Step 2: Add to the above and blend in.
–	14	Patent flour	Step 3: Add to the above and mix until smooth and spreadable.

4 2 Total Weight

Honey-Fruit Filling **Basic Mix**

Lb.	Oz.	INGREDIENTS	METHOD
1 1 1 –	8 8 – 1	Brown sugar Margarine Honey Salt	Step 1: Use a paddle. Blend together thoroughly.
1	8	Chopped fruits	Step 2: Add to the above and blend in so fruit is well distributed.
–	8	Patent flour	Step 3: Add to the above and mix until smooth and spreadable.

6 1 Total Weight

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CAKE-BAKING TIME- AND-TEMPERATURE CHART

TYPES	MIXING TEMPERATURE	QUANTITY OF BATTER IN PAN	SIZE OF PAN	BAKING TEMPERATURE	BAKING TIME MINUTES	
LAYERS				F	Min	Max
White	75	6 to 7 oz	6 x 1¼ inches	375 to 400	12	15
Yellow	75	6 to 7 oz	6 x 1¼ inches	375 to 400	12	15
Devil's Food	75	6 to 7 oz	6 x 1¼ inches	375 to 400	12	15
SHEETS			Width—Length			
Devil's Food	75	6 lbs	18 x 26	375 to 400	30	45
Butter Sponge	95 to 110	3 to 3½ lbs	18 x 26	350 to 375	30	45
Jelly Roll	95 to 110	3 to 3½ lbs	18 x 26	400 to 425	12 min	
Chocolate Roll	95 to 110	3 to 3½ lbs	18 x 26	400 to 425	12 min	
Sponge Sheet	95 to 110	3 to 3½ lbs	18 x 26	400 to 425	12 min	
LOAF			Wd Dp Lg			
Angel Food, Plain	75	6 to 7 oz	3½ x 2½ x 7½	350 to 375	20	25
Angel Food Fruit	75	6 to 7 oz	3½ x 2½ x 7½	350 to 375	20	25
Chocolate Loaf (Sponge Type)	95	7 to 8 oz	3½ x 2½ x 7½	350 to 375	20	25
Sunshine	95	9 to 10 oz	8 round 2 deep	350 to 375	30	40
Wine Loaf	75	1 lb	3½ x 2½ x 7½	350 to 375	40	50
Fig Loaf	75	1 lb 2 oz	3½ x 2½ x 7½	350 to 375	50	60
Date Loaf	75	1 lb 2 oz	3½ x 2½ x 7½	350 to 375	50	60
POUND			Wd Dp Lg	F	Min	Max
Pound Cake, Plain	75	18 oz	3½ x 2½ x 7½	360	1 hour	
Pound Cake, Fruit	75	18 oz	3½ x 2½ x 7½	360		
BOX						
Sponge	95 to 110	3 lbs	6½ x 3 x 11½	300 to 340	2 hours	
Yellow	75	3 lbs	6½ x 3 x 11½	300 to 340	2 hours	
White	75	3 lbs	6½ x 3 x 11½	300 to 340	2 hours	
Fruit	75	3 lbs 8 oz	6½ x 3 x 11½	300 to 340	2¼ hours	
TORTEN*			Diameter Depth			
Filbert	95	5 oz	8 x 1	300 to 350	15 min	
Linzer	95	8 oz	8 x 1	300 to 350	15 min	
Sand	95	8 oz	8 x 1	300 to 350	15 min	
Chocolate	95	8 oz	8 x 1	300 to 350	15 min	
FRUIT & WEDDING			Wd Dp Lg			
Fruitcake, 1 pound	75	1 lb 2 oz	3 x 2½ x 6	300 to 350	1¼ hours	
Fruitcake, 5 pound	75	5 lbs 6 oz	Large Round	300 to 350	2½ to 3 hours	
Wedding, 5 pound	75	5 lbs 6 oz	Large Round	300 to 350	2½ to 3 hours	

AMOUNT OF BATTER REQUIRED FOR PANS OF DEFINITE DIMENSIONS

SIZE OF PAN	CAPACITY OF PAN C. I.	POUND CAKE OZS.	LAYER CAKE OZS.	ANGEL CAKE OZS.	SPONGE CAKE OZS.
6" x 1"	28.4	6¾	5½	3½	3¼
7" x 1"	38.5	9⅓	7½	4¾	4¼
8" x 1"	50.4	12⅓	10	6¼	5⅓
9" x 1"	63.8	15⅓	12½	7½	6¾
10" x 1"	78.5	19	15½	9½	8½
11" x 1"	95.3	22¾	18¾	11½	10
12" x 1"	115.0	27½	22½	14	12½
6" x 1¼"	35.3	8½	7	4⅓	4
7" x 1¼"	48.2	11⅓	9½	6	5⅓
8" x 1¼"	63.0	15⅓	12⅓	7¾	6¾
9" x 1¼	80.0	19⅓	15¾	9½	8½
10" x 1¼"	98.2	23¾	19⅓	12	10½
11" x 1¼	119.0	28⅓	23½	14½	12½
12" x 1¼	141.0	34½	28	17½	15½
6" x 1½	42.4	10¼	8½	5¼	5
7 x 1½	57.7	14	11½	7¼	6½
8 x 1½	75.4	18⅓	14⅔	9½	8
9" x 1½	95.2	23	18¾	11⅓	10
10" x 1½	118.0	28½	23⅓	14⅓	12¾
11" x 1½"	142.0	34¼	28	17⅓	15
12" x 1½"	170.0	41¼	33¾	21	18¾

TABLE OF EQUIVALENTS

Baking Powder	1 oz. = 2½ Tbsp.	**Mace, Ground**	1 oz. = 4 Tbsp.
Baking Soda	1 oz. = 2 Tbsp.	**Milk, Evaporated**	1 lb. = 2¼ Cups
Cake Crumbs	3 oz. = 1 Cup	**Milk, Liquid**	1 lb. = 2 Cups
Cardamom, Ground	1 oz. = 5 Tbsp.	**Milk, Powdered**	1 lb. = 4 Cups
Chocolate, Grated	1 oz. = 4 Tbsp.	**Nutmeats, Chopped**	4 oz. = 1 Cup
Cinnamon, Ground	1 oz. = 4½ Tbsp.	**Oil, Salad**	7 oz. = 1 Cup
Cocoa	1 lb. = 4¼ Cups	**Orange Rind**	1 oz. = 4 Tbsp.
Cream of Tartar	1 oz. = 3 Tbsp.	**Salt**	1 oz. = 2 Tbsp.
Eggs, Whole (10)	1 lb. = 2 Cups	**Shortening**	1 lb. = 2½ Cups
Eggs, Whites (18)	1 lb. = 2 Cups	**Sugar, Brown**	1 lb. = 3 Cups
Eggs, Yolks (24)	1 lb. = 2 Cups	**Sugar, Granulated**	1 lb. = 2¼ Cups
Flour (sifted)	1 lb. = 4½ Cups	**Sugar, Icing**	1 lb. = 3½ Cups
Honey	11 oz. = 1 Cup	**Vanilla**	1 oz. = 2 Tbsp.
Lemon Juice	1 oz. = 2 Tbsp.	**Water**	1 lb. = 2 Cups
Lemon Rind	1 oz. = 4 Tbsp.	**Yeast**	½ oz. = 1 Cake

Glossary of Baking Terms *

Absorption — A taking into, by the action of the molecules of a substance. In baking, the property of flour to absorb and hold liquid.

Acidity — Sourness: tartness: a condition indicating excess fermentation in yeast doughs.

Add-mix — An additional flavoring unit, of one or more ingredients, added to a basic mix to change appearance and taste.

Aeration — The treatment of dough or batter by charging with air or gas (such as carbon dioxide) to increase the volume.

Agar-agar — A gelatinous seaweed product used for bacteria culture or in making decorating jelly or gumdrops.

Albumen — Egg white.

Almond — The nut of a small tree resembling a peach tree.

Almond paste — Almonds ground to paste, with sugar as a preservative.

Almond sponge — A cake batter containing almond paste.

Almond tart — A tart with a filling of egg white and almond paste.

Angel food — A fine white cake, without shortening, made of egg white, sugar, flavoring, and flour, baked in a tube pan.

Angel-food tin — A round loaf pan having a center tube.

Angelique (Angelica). — Candied leaf stalks of an aromatic plant, used for decorating.

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* Courtesy of Armour and Company, Chicago, Illinois (slightly adapted).

Anise drops — Small cookies flavored with anise oil or anise seed.

Anise oil — Flavoring made from seeds of anise — a plant of the celery family.

Apricot glace — A jam-like product of boiled apricots and sugar.

Ash — The powdery, incombustible residue left after burning matter.

Average flour value — A value composed of four factors — color of flour, loaves per barrel, size of loaf, and quality of bread as applied to any given shipment of flour.

Bacteria — Microscopic plants, some types of which are involved in fermentation and spoilage.

Bake — To cook by dry heat in a closed place, as an oven.

Baking powder — A chemical leavening agent composed of soda, dry acid, and, usually, cornstarch to absorb air moisture; when wet, carbon dioxide (a gas) is given off to raise the batter.

Baking soda (Bicarbonate of soda) — A sodium salt having the ability to combine with acid to produce carbon dioxide. It is alkaline in nature.

Barrel — A flat-ended, wooden, somewhat cylindrical container with bulging sides. A standard-size barrel contains 31½ gallons of liquid or 196 lbs. of flour.

Bars — Cookies made in oblong shapes.

Batter — A pourable mixture of combined ingredients such as flour, sugar, eggs, shortening, milk, etc.

Biscuit — Small roll made with yeast dough.
Small round breadstuff made of dough raised with baking powder.
Kind of crisp or hard bread, thin and flat, made without leavening.

Bleeding — Term applied to dough that has been cut and left unsealed at the cut, thus permitting the escape of air and gas.

Blend — a mixture of two or more flavorings or grades of flour.

Boil — To bubble, emitting vapor (gas), when heat is applied. Boiling temperature for water is 212°F., at ordinary altitudes, or 100°C. Other liquids have other boiling points.

Boiled icing — An icing made by boiling sugar and water to thread stage (238°F.), then adding it to beaten egg whites.

Bolting — Sifting of ground grain to remove the bran.

Boston brown bread — A dark, sweet bread (not yeast-raised) containing among the ingredients, cornmeal and molasses; steamed rather than baked.

Bowl knife — A spatula or flexible dull-edged knife used to scrape batter or dough from bowl sides.

Bran — Skin or outer covering of the wheat berry; it is removed during milling.

Bran muffin — Sweet muffin containing a large percentage of bran.

Brandy — An alcoholic liquor distilled from wine.

Bread – The accepted term for food made of flour, sugar, shortening, salt, and liquid, made light by the action of yeast.

Bread schedule – List of exact periods of dough fermentation; also shows time needed for completing the baking process.

Bread scoring – Analysis of finished loaf to determine quality.

Buns – Small cakes of bread dough, sometimes slightly sweetened or flavored.

Butter – Fat obtained by churning sweet or sour cream.

Butter-cream frosting – Rich, uncooked frosting containing powdered sugar, butter and/or other shortening, and egg white and/or water.

Butter horns – Basic sweet dough cut and shaped like horns.

Butter sponge – Sponge-cake type batter to which shortening is added. Used for Torten and French Pastry, also some layers.

Butterscotch – A flavor produced by the use of butter and brown sugar.

Butter stars – Cookies made by pressing rich dough through star tube.

Cacao – An evergreen tree, native to tropical America, from the seeds of which chocolate and cocoa are obtained.

Cake – A leavened and shortened sweet product containing flour, sugar, salt, egg, milk, liquid, flavoring, shortening, and leavening agent.

Cake machine – Machine with vertical agitators operating at different speeds, used for mixing cake ingredients.

Cane sugar – A sweet carbohydrate obtained from the sugar cane plant.

Caramel buns – Sweet-dough pieces baked in a sugared pan.

Caramel icing – Cooked icing of brown sugar, shortening, and milk.

Caramel sugar – Cane sugar boiled to a certain density, then cooled and pulled for use in decorating.

Caramelized sugar – Dry sugar heated, with constant stirring, until it melts and darkens in color; used for flavoring and coloring.

Carbohydrates – Various sugars and starches, obtained chiefly from vegetable sources all of which contain carbon, hydrogen, and oxygen.

Carbon dioxide – A colorless, tasteless, edible gas obtained during fermentation or from a combination of soda and acid.

Carbonated ammonia – Leavening agent made of ammonia and carbonic acid.

Cardamon – Seed of an East Indian spice plant; used for flavoring.

Casein – The main protein in milk.

Cheese cake – Cake made of sweet or short dough base with a filling of combined cheese, eggs, and milk.

Cheese torte – A rich cheese mixture baked in a shell of combined crumbs, sugar, and butter.

Chocolate snaps – Fairly crisp drop cookies flavored with chocolate.

Cinnamon — The aromatic bark of certain trees of the laurel family; ground and used as spice flavoring.

Citron — The preserved, sweetened rind of a fruit like a large lemon.

Clear flour — Flour made from middlings after patent flour is taken.

Cocoa — A powder made from chocolate minus most of its cocoa butter.

Coconut — The inside meat of the coconut, shredded or grated.

Coffee cake — Sweet bread in various shapes, with filling and topping.

Colors — Shades produced by use of vegetable dyes.

Compounds — In the baking industry, certain mixtures of fats and oils.

Congealing point — Temperature at which a liquid becomes solid.

Corn flour — Coarse flour ground from corn; finer than meal.

Cornmeal — Granular form of corn, somewhat coarser than corn flour.

Corn muffin — Sweet muffin containing corn flour or meal.

Cornet — A horn-shaped container of paper or cloth used for tubing soft doughs, frostings, etc.

Cottage cheese — The drained curd of soured cow's milk.

Cream cheese -- The drained curd of soured cream, pressed.

Cream — The fat part of cow's milk.

A thickened, cooked mass of sugar, egg, milk, and a thickener, used for pies and fillings.

Creaming — The process of beating sugar and shortening together.

Cream pies — One-crust pies having cream filling, topped with whipped cream or meringue.

Cream puffs — Baked puffs of cream-puff dough (choux paste) which are hollow; usually filled with whipped cream or a cooked cream.

Cream rolls — Puff paste rolled and baked in spiral shape, then filled with whipped cream or marshmallow.

Creme de menthe — A liqueur, usually green, with a mint flavor.

Crescent rolls — Hard-crusted rolls shaped into crescents, often with seeds on top.

Crullers — Long, twisted baking powder doughnuts.

Cupcakes — Small cakes of layer-cake batter, baked in muffin pans.

Currant — The berry of a shrub, usually used dried.

Custard — A sweetened mixture of eggs and milk which is baked or cooked over hot water.

Danish pastry — A flaky yeast dough having butter or margarine rolled into it.

Dates — The fruit of a species of palm — very sweet.

Date filling — A cooked blend of dates, water, and sugar.

Decoration — Trimming with fancy designs.

Dextrose — Sugar of many fruits and vegetables (except beet), less sweet than cane or beet sugar and more simple in structure, chemically speaking. Often made from starches.

Dextrin — A soluble, gummy substance formed from starch by the action of heat, ferments, etc.

Diastase — An enzyme possessing the power to convert starches into dextrin and maltose (a simple sugar).

Dissolve — To liquefy or carry in suspension in liquid.

Divider — A machine used to cut flattened dough automatically into the required size.

Dough — The thick, uncooked mass of combined ingredients for bread, rolls, cookies, etc.; usually applied to bread.

Doughnut — A round cake, usually with center hole, made of yeast dough or baking-powder dough and cooked in hot, deep fat.

Doughnut screens — Screens used to lift doughnuts from fat or for keeping them under surface of the fat during cooking.

Dry milk — Milk from which water has been removed by drying.

Drops — Small globules of liquid that will drip instead of flow from spoon or container. A form of cooky.

Dry fruit — Fruit from which moisture has been removed by drying.

Dry yeast — A form of yeast from which most of the moisture has been removed.

Dusting — Distributing a film of flour on pans or workbench or baked goods.

Dusting flour — Flour spread on workbench to prevent sticking.

Eclair — A long, thin shell made of cream-puff dough and filled.

English brandy snaps — Spicy cookies, very small and flat.

Enriched bread — Bread made from enriched flour, containing federally prescribed amounts of thiamin, riboflavin, niacin, and iron.

Enzyme — A substance produced in minute amounts by living organisms which has the power to bring about changes in organic materials.

Evaporated milk — Unsweetened canned milk from which water has been removed before canning.

Extract — A solution, usually in alcohol, of the flavoring elements of fruits or spices.

Ferment — A substance, such as yeast, producing fermentation.

Fermentation — The chemical changes of an organic compound due to action of living organisms (as yeast), producing the leavening gas carbon dioxide.

Filberts — Cultivated hazel nuts.

Filbert rolls — Jelly-roll type of cake with roasted filberts in filling and batter.

Fillings — Sweet creams, jams, etc. placed between baked layers, in cake rolls, or shaped into yeast-raised goods.

Finger roll — A bun about five inches long and one inch wide.

Firing — Process of heating an oven with fuel.

Flavor – An extract, emulsion, or spice used to produce a pleasant taste.
The taste of a finished product.

Flour – Finely ground meal of grain (wheat, rye, etc.).

Fluff – A mass of beaten egg white and crushed fruit.

Foam – Mass of beaten egg and sugar, as in sponge cake, before adding flour.

Fold – The method of lapping dough over on itself after it reaches right degree of fermentation, as in making yeast-raised sweet goods.

Fold in – To incorporate one product into another with an over-and-under movement.

Fondant – An icing of boiled sugar and water, without egg white.

Fondant slab – Marble slab on which fondant is worked until creamy.

Formula – In baking, a recipe giving ingredients, amounts to be used, and method of combining them.

French bread – An unsweetened, crusty bread baked in a narrow strip and containing very little shortening.

French knife – A long knife with pointed blade used in cutting cakes, doughs, and nuts.

Fritters – Doughnuts made from cream-puff paste and fried in hot deep fat.
Fruit-filled drops of heavy cake batter fried in deep fat.

Fruit cake – A loaf containing large amounts of dried fruits and nuts with only enough batter to bind the fruit together.

Frying – In the baking industry, cooking in hot, deep fat.

Fuel – Anything which is burned to give heat.

Garnishing bag – Similar to a cornet and equipped with fancy tips.

Gateau – French term for torte.

Gelatinization of starch – Formation of jelly-like substance when moistened starch is cooked.

Germ – That part of seed (such as in grain) from which the new plant grows.
Micro-organism that is harmful to people.

Ginger – The spicy root of a tropical plant, used for flavoring.

Glace – Sugar so treated as to look like ice.

Gliadin – The part of gluten that gives it elasticity.

Glucose – A simple sugar made by action of acid on starch (corn syrup).

Gluten – The protein part of flour which gives structure to bakery products by enabling flour to expand around air or gas and to hold the texture so formed.

Glutenin – That part of gluten which gives it strength.

Grading – Separating middlings of wheat according to size.

Graham flour – Unbolted wheat meal.

Graham muffin – Sweet muffin with graham flour as main ingredient.

Greasing – Spreading a film of fat on a surface.

Gum paste — A white modeling substance of gum tragacanth and sugar.

Gum tragacanth — A gum obtained from certain plants, used to give firmness to confections.

Hamburger roll — A soft round bun about 4 inches in diameter.

Hard water — Water with certain mineral salts present in greater amount than in soft water.

Hazel nut — Nut of a wild American shrub, smaller than the filbert.

Hearth — Any heated baking surface or floor of an oven.

Holland rusk — Toast of yeast biscuits rich in milk, eggs, etc.

Home-style bread — Plain-topped bread sprinkled with flour before panning.

Honey — A sweet, syrupy substance made by bees from flower nectar.

Horn of plenty — Cornucopia-shaped cooky with gum paste or buttercream trimming.

Horseshoes — Danish or puff pastry shaped like horseshoes.

Hot cross buns — Sweet, spicy, fruity buns with a cross-like cut on top which is usually filled with plain frosting.

Humidity — Amount of moisture in the air.

Hydrogenated oil — Oil treated with hydrogen to make a solid type of shortening.

Hygrometer — An instrument to measure humidity.

Ice — To frost or put on an icing or frosting.
Frozen water.

Infection — A disease or harmful condition produced by micro-organisms.

Ingredients — Food materials used in baking and cooking.

Inventory — Itemized list of goods and equipment on hand.

Invert sugar — A simple sugar; combination of dextrose and levulose.

Jelly — A stiffened combination of fruit juice and sugar, stiffened by the action of the sugar on the pectin in the fruit.

Jelly wreath — A rolled ring of basic sweet dough containing jelly.

Kernel paste — A mass of ground apricot kernels and sugar.

Kisses — A meringue confection of egg white and sugar baked slowly.

Lactose — The sugar of cow's milk.

Lady Baltimore cake — Rich white layer cake with fruit and nut filling and white icing.

Lard — Rendered hog fat.

Leavening — Raising or lightening by air, steam, or gas (carbon dioxide).

Leavening agent — An ingredient (or more) used to introduce carbon dioxide — as yeast, baking powder, or soda plus sour milk.

Leipziger stollen — Very rich coffee cake with a great deal of fruit.

Levulose – A simple sugar found in honey and fruits.
Linzer torte – A heavy cake of macaroon paste and jelly.
Loaf bread – Bread baked in pans.
Loaf cake – Cake baked in bread pan or similar deep container.

Macaroons – Small cookies of nut paste (as almond), sugar, and egg white.
Make-up – Method of mixing ingredients.
Malt extract – A syrupy liquid obtained from malt mash.
Maple flavoring – An extract of maple sugar or a syrup so flavored.
Maraschino – Cordial distilled from Maraca cherry juice.
Maraschino cherries – Artificially colored (red) cherries in maraschino.
Marble cake – Cake of two or three colored batters partially mixed.
Marshmallow – A white confection of meringue-like consistency.
Marzipan – Almond paste used for modeling, masking, and torten.
Masking – Act of covering with icing or frosting or such.
Meal – Coarsely ground grain; unbolted wheat flour.
Measuring cup – A standardized cup marked with fractions of a cup, used for accurate measure.

Measuring spoons – Sets of standardized spoons (tablespoon, teaspoon, half, and quarter) insuring accurate measurement.
Melting point – The temperature at which a solid becomes liquid.
Meringue – A white frothy mass of beaten egg white and sugar.
Metric system – A system of weights and measures based on units of ten.
Middlings – Coarse particles of ground wheat made during rolling of the grain in flour mills.
Milk bread – White bread in which all liquid is milk or which contains not less than 8.8 parts (by weight) of milk solids for each 100 parts of flour (by weight). This is a federal standard that is rigidly enforced.
Milk solids – All of cow's milk except the water.
Mince meat – Combination filling of fruit, spices, beef, and suet.
Mix – The combined ingredients of a batter or dough.
Mixing – The blending of ingredients.
Mocha – A flavor predominatly that of coffee.
Moisture – Water held in or appearing on a substance.
Molasses – Light to dark brown syrup obtained in making cane sugar.
Mold infection – Casual introduction of certain foreign, harmful microscopic organisms.
Molder – Machine that shapes dough pieces for various shapes.
Muffins – Small, light quickbreads baked in muffin pans.

Mushrooms — Schaum torte confections in mushroom shapes.

Neopolitans — Puff-paste slices filled with cream and frosted.

Oatmeal — Meal made by grinding oats.
One-mix — A cake mixing method where all ingredients are combined and beaten at one time.

Parkerhouse rolls — Folded buns of fairly rich dough.
Patent flour — The fine meal of ground spring wheat.
Pie — Dessert with pastry bottom, fruit or cream filling, and meringue, whipped cream, or pastry top.
Press — A round, molded piece of dough which has been scaled to a specific weight.
Press machine — same as Divider.
Proof box — Box or cabinet equipped with shelves, used for fermenting dough; it permits the introduction of heat and steam.
Proofing period — The time during which dough rises.
Puff paste — Rich pastry with extra butter and special shortening for added flakiness.
Punch — See Fold.

Quick bread — Dough for bread or rolls raised by baking powder.

Raisins — Dried sweet grapes, either dark or bleached.
Rocks — Small rough-surfaced cookies resembling stone shapes.
Rolling pin — Smooth-surfaced wooden piece for rolling dough.
Rolls — Soft breads sometimes called buns.
Hard-crusted pieces of lean dough.
Rope — A spoiling bacterial growth in bread, formed during production.
Rounding — Shaping of dough pieces to seal ends and prevent bleeding.
Royal icing — Decorative frosting of cooked sugar and egg white.

Salt — Sodium chloride; used for flavor and dough control.
Saturation — Absorption to the limit of capacity.
Scaling — Dividing batter or dough into smaller pieces of a specific weight.
Schedule — Shop form designating amount and types of goods to be made and hour when needed.
Scoring — Judging finished goods according to certain standards for color, texture, flavor, etc.
Shortening — Fat or oil used to tenderize baked products.
Sifting — Passing through fine sieve for blending and removing foreign or over-size particles.
Snaps — Small cookies that run flat during baking.

Solidifying point – Temperature at which a fluid changes to a solid.
Spices – Dry, aromatic vegetable substances, used for flavoring.
Steam – Vapor formed and given off when water is heated to the boiling point.
Straight flour – Flour containing all of the wheat berry except the bran and feeds.

Tarts – Pastries with heavy fruit filling or cream.
Tea rolls – Small sweet buns.
Temperature – Degree of heat or cold.
Tempering – Adjusting temperature of ingredients to a certain degree.
Testing – Trying a cake or bread at the oven for doneness.
Checking product or ingredients for quality, according to a set method.
Texture – Interior grain or structure of a baked product as shown by a cut surface.
The feeling of a substance under the fingers.
Thermometer – An instrument for measuring temperature.
Torten – Large fancy cakes enriched with creams, marzipan, etc.
Troughs – Large rather shallow containers, usually on wheels, used for holding large masses of rising dough.
Tubing – Pressing a substance through a decorating or other tube.
Tutti frutti – A confection or filling made of a fruit mixture.

Vegetable colors – Liquids or pastes of vegetable nature, used for coloring.
Vienna bread – A hearth bread with heavy crisp crust, sometimes finished with a seed topping.

Wash – A liquid brushed on the surface of an unbaked product (may be water, milk, starch solution, thin syrup, or egg).

Whip – To beat to a froth.
An instrument consisting of strong wires held together by a handle and used for whipping.

Yeast – A microscopic fungus (plant) which reproduces by budding and causes fermentation, giving off carbon dioxide in the process.

Zwieback – A toast made of rich coffee cake.

Lb.	Oz.	INGREDIENTS	METHOD
			Step 1:
			Step 2:
			Step 3:

Total Weight

Lb.	Oz.	INGREDIENTS	METHOD
			Step 1:
			Step 2:
			Step 3:

Lb.	Oz.	INGREDIENTS	METHOD
			Step 1:
			Step 2:
			Step 3:

Total Weight

Lb.	Oz.	INGREDIENTS	METHOD
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			Step 2:
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Lb.	Oz.	INGREDIENTS	METHOD
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Total Weight

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Total Weight

Lb.	Oz.	INGREDIENTS	METHOD
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			Step 3:

Total Weight

Lb.	Oz.	INGREDIENTS	METHOD
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			Step 2:
			Step 3: